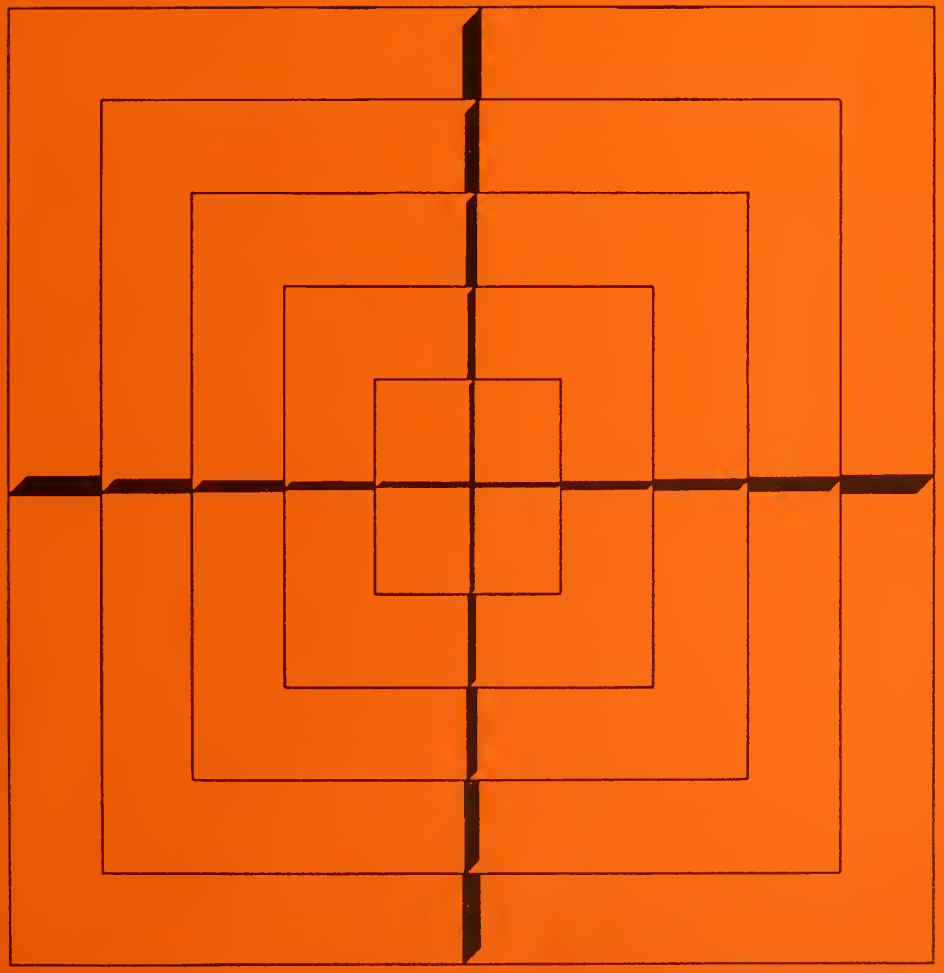
Medicare Annual Report

Fiscal Year 1981



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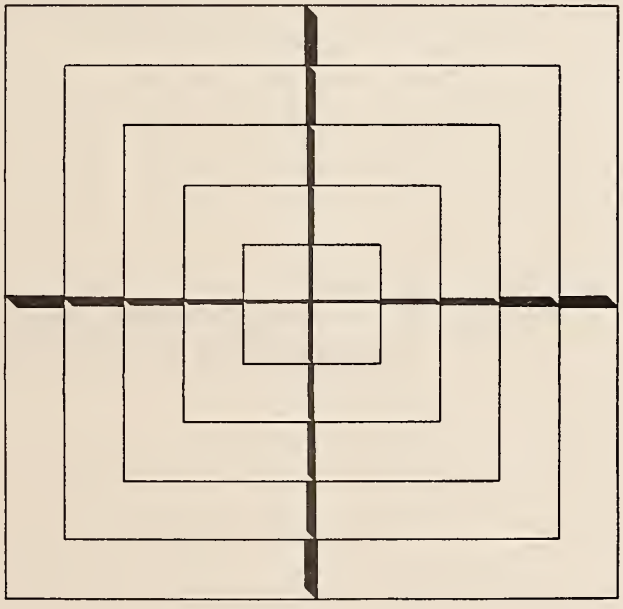

Department of
Health & Human
Services

Health Care
Financing
Administration

FIFTEENTH ANNUAL REPORT
ON MEDICARE
COVERING FISCAL YEAR 1981

Including Reports on the
Medigap Program and the
End Stage Renal Disease Program

By the Health Care Financing Administration
of the Department of Health and Human Services

Pursuant to the Social Security Act, as
amended: Sec. 1875(b) (42 U.S.C. 139511
(b)); 1881(g) (42 U.S.C. 1395rr(g)); Sec.
1882(f)(2) (42 U.S.C. 1395ss(f)(2))

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EXECUTIVE SUMMARY

This annual report describes the performance of the Medicare program during its fifteenth year. For the first time, the report is divided into two parts: Part I, which provides an update on the Medicare program based on fiscal year 1981 activities and includes, in Chapter II, Section I, information on the effectiveness of the Medigap program enacted by Congress in 1980, and Part II, which reports on the End Stage Renal Disease program in calendar year 1981. These reports are mandated by Congress, pursuant to the Social Security Act, as amended: Sections 1875(b), 1881(g), and 1882(f)(2).

PART I

MEDICARE
Fiscal Year 1981

PROGRAM OPERATIONS

Beneficiaries - As of January 1, 1981, 25.8 million aged persons and 3.0 million disabled persons under 65, a total of 28.8 million, were entitled to Medicare. Of the 28.8 million enrollees, 28.4 million had hospital insurance (Part A) and 27.6 million had enrolled in the voluntary medical insurance program (Part B). Of beneficiaries aged 65 and over, 95 percent were covered by both Part A and Part B; 92 percent of disabled beneficiaries were covered by both parts.

Health Care Resources - As of July 1, 1981, there were 6,736 hospitals participating in Medicare, with 1,147,324 beds. There were 5,258 skilled nursing facilities, 3,110 home health agencies, 3,484 independent laboratories and 1,111 facilities or units providing services to program beneficiaries requiring maintenance dialysis or kidney transplant. Additionally, 427 rural health clinics had been certified to participate in the program.

Benefit Payments - During FY 81, Medicare paid $28.9 billion in benefits under hospital insurance (Part A) and $12.3 billion under medical insurance (Part B). These amounts represent an increase of 22 percent over FY 80 payments of $23.8 billion and $10.1 billion, respectively. Inpatient hospital care accounted for 96 percent of all Part A payments. Medical insurance payments were predominately for physician and other Part B suppliers' services, accounting for 71 percent of Part B payments.

Claims Processing Performance - Claims received by Part A intermediaries increased to 44.9 million in FY 81, an increase of 7.1 percent over the FY 80 experience. Claims received by carriers rose at a rate of 11.1 percent, totaling 171.7 million in FY 81. Overall, the volume of Medicare claims rose 10.3 percent. The average claim processing time for intermediaries decreased from 10.0 days to 9.5 days. Carriers showed a decrease in yearly average claim processing time from 13.0 days to 12.2 days. The average monthly percentage of bills pending over 30 days for intermediaries increased slightly from 16.0 to 16.3 percent. Carriers' average monthly percentage of bills pending over 30 days decreased from 14.4 to 13.9 percent.

Contractor Administrative Cost Experience - The FY 81 intermediary workload increased 6.9 percent over FY 80. The total cost increased 8.5 percent. The unit cost for all operations increased by 9 cents.

For carriers, the workload increased by 11.3 percent. The unit cost increased by 5 cents during FY 81 and the total cost by 13.2 percent.

Program Funding - The primary source of hospital insurance financing is contributions, based on earnings, by workers and their employers, and by self-employed individuals. The remainder is derived from general revenues and other sources. Medical insurance (Part B) is financed by three sources: (1) premium payments from enrollees, (2) contributions from general revenues, and (3) interest on trust fund accumulations.

PROGRAM ADMINISTRATION

Administrative Structure - The overall responsibility for administration of Medicare is vested by law in the Secretary of the Department of Health and Human Services (DHHS). Within DHHS, primary responsibility for administering the Medicare program is assigned to the Health Care Financing Administration (HCFA). The Social Security Administration is involved in the enrollment of beneficiaries in the program and other beneficiary related activities. The Department's Public Health Service (PHS) acts as a valuable resource in the professional health aspects of the Medicare program. The Office of Civil Rights is responsible for assuring compliance with Title VI of the Civil Rights Act of 1964. The Secretary also uses the services of appropriate State or local health agencies to determine whether providers of service and independent laboratories meet the conditions for participation in the Medicare program. Intermediaries (Part A) and carriers (Part B) contract with the Federal government to reimburse providers for services rendered to beneficiaries and to provide other services, in accordance with their agreements.

Intermediary and Carrier Performance - During FY 81, HCFA evaluated the performance of Medicare contractors using the Contractor Performance Evaluation Program (CPEP). In this program, specific standards and criteria were applied to all carriers and intermediaries.

In 1981, 24 poor-performing Medicare contractors (including field office sites) were identified by using results from the Part A CPEP and three years of performance data for the Part B carriers.

Contracting Initiatives and Experiments - Under Section 222 of P.L. 92-603, HCFA was granted experimental authority to test incentive contracting for intermediary and carrier administrative functions. Under an incentive contract, intermediaries and carriers are reimbursed on other than a cost related basis, rather than on actual costs incurred. They are at risk and may suffer monetary damages for failure to meet performance objectives. As a result of assuming the risk of non-performance, intermediary or carrier internal management is responsible for improved efficiency and economy in operations. HCFA has taken action in the experimental contracts to assure that a continuing high level of service to Medicare beneficiaries and providers is maintained. In each experimental contract, performance requirements have been introduced which exceed those applied to the incumbent contractors reimbursed on a cost basis.

The use of incentive contracts on an experimental basis, authorized by Congress in 1972, is a departure from the basic statutory authority directing HCFA to reimburse contractors for the necessary and proper cost of administration of their contract duties. The experimental contracts utilize selected performance standards and existing quality control and performance review procedures and provides for the assessment of liquidated damages if the contractor fails to meet the standards established. Evaluations are made of actual performance against the standards and are completed on a quarterly basis by regional office staff.

Improving Utilization Safeguards - One of the most critical areas of Medicare program activity is to establish safeguards against improper and excessive utilization of health care services. The program has approached its responsibilities in this area in a number of ways, with its structure providing some fundamental controls. For example:

Deductible and coinsurance amounts.

Services furnished on a physician's order under direction of a physician.

Service reasonable and necessary for the diagnosis and treatment.

HCFA has continued to refine the pre- and post-payment screens which intermediaries and carriers utilize to identify situations of potential overutilization or variations from medical necessity norms.

REIMBURSEMENT CONTROLS/POLICY INITIATIVES

In FY 81, initiatives were undertaken to contain program costs without reducing the quality and accessibility of health care services to program beneficiaries. Of significance were:

Reasonable Cost Limits - Initially, provider reimbursement included all necessary and proper expenses incurred in the delivery of patient care. However, reimbursement based on incurred costs did not offer sufficient incentives to control the rapid escalation of health care expenditures. Section 223 of the Social Security Amendments of 1972 (P.L. 92-603) amended the definition of reasonable cost to exclude costs determined to be unnecessary in the efficient delivery of needed health services. Subsequent regulations authorized the establishment of prospective cost limits based on provider classification.

In FY 81, the reasonable cost limits were updated effective July 1, 1981, for hospitals and home health agencies and October 1, 1981 for skilled nursing facilities. The Omnibus Budget Reconciliation Act of 1981, enacted August 13, 1981, reduced the level of cost limits for hospitals and home health agencies for the period ending after September 30, 1981. Notices implementing these changes were published in the Federal Register on September 30, 1981.

Inpatient Routine Nursing Salary Cost Differential - Section 2141 of the Omnibus Budget Reconciliation Act of 1981 (P.L. 97-35) reduced the inpatient routine nursing salary cost differential as a reimbursable cost of hospitals, to a "... rate not to exceed 5 percent..." effective October 1, 1981. Regulations implementing this provision were published in the Federal Register on October 1, 1981.

Reimbursement for Swing-Bed Services - During FY 81, HCFA worked on regulations implementing the swing-bed provision (Section 904 of P.L. 96-499) of the Omnibus Budget Reconciliation Act of 1980. Under this provision, small rural hospitals with less than 50 beds which have been granted a certificate of need for the provision of skilled nursing and intermediate care services from the State, and which have an agreement with DHHS, can use their hospital beds interchangeably as either hospital, skilled nursing or intermediate care beds. Reimbursement is based on the specific type of care provided. The provision was added to increase the number of nursing home beds in rural areas.

Reimbursement for Alternative Placement Days - During FY 81, HCFA worked on developing the regulations to implement this provision.

Salary-Related Reimbursement of Certain Therapy Services - During FY 81, HCFA issued updated guidelines for physical therapy and respiratory therapy. In addition, HCFA published in the Federal Register on August 13, 1981 proposed changes in the methodology used to establish the guidelines.

Bonding and Escrow Requirements for Home Health Agencies - Section 930(n) of P.L. 96-499 gives the Secretary authority to establish requirements, including bonding and the establishment of escrow accounts, for home health agencies (HHA's) as appropriate for the financial security of the program. Section 930(p) provides that costs an HHA incurs in complying with these requirements are not reimbursable under Medicare. Moreover, an HHA subject to these requirements cannot be reimbursed for interest costs incurred in borrowing to repay an overpayment unless the HHA has been determined to have acted in good faith. A notice of proposed rule making was prepared in FY 81 to establish financial security requirements consistent with Congress' concerns while minimizing the adverse financial consequences such requirements would have.

Reasonable Compensation Guidelines - During FY 81 a national survey of key administrative positions was conducted to obtain statistically valid compensation data for selected administrative positions for each type and class of provider. The data will be used to establish reasonable compensation ranges in determining the allowability of compensation costs under Medicare regulations.

Revision of the Medicare Home Health Agency Cost Report - HCFA issued new cost reporting forms for home health agencies that required all home health agencies to use a single method of cost reporting. This will permit HCFA to accumulate comparable cost data from HHA's and apply cost limits in a uniform manner.

OTHER POLICY INITIATIVES/ISSUES

Ambulance Services - Regulations were published as a Notice of Proposed Rule Making on August 27, 1980. These proposed regulations expand the ambulance benefit to include (1) round trip transportation of a hospital inpatient to the nearest appropriate treatment facility to obtain necessary medical services not available in the hospital, and (2) round trip ambulance transportation of all other patients to obtain necessary radiological services. The regulations specify that the availability of a physician or physician specialist capable of providing the treatment required by the beneficiary's condition is a factor in determining whether a hospital has appropriate facilities to care for the beneficiary.

Oxygen Therapy in the Home - A notice published in the Federal Register on December 14, 1979, contained proposed policies and guidelines that Medicare Part B contractors would apply, where necessary, to claims for oxygen used in the home. The objective was to assure that uniform criteria are applied by contractors in determining whether a valid medical need for oxygen exists so that the home use of oxygen can be paid for by the program.

Criteria and guidelines in this area are being reviewed within the Department.

Medicare Coverage of Heart Transplantations - HCFA is undertaking a broad study of all aspects of medical coverage of heart transplantation, including social, economic, and scientific issues, in an effort to develop definitive national coverage policy. Heart transplantation is now excluded from coverage, effective June 13, 1980. This rescinded an earlier interim decision that authorized coverage only for heart transplants done at Stanford University Medical Center.

Medicare Coverage Decision Procedures - HCFA's process for developing national coverage policy determinations as to whether health care items and services are "reasonable and necessary" under the law has continued to improve. The HCFA Physicians Panel met regularly to discuss and advise on new and unusual questions, and to recommend referral of selected questions to the Public Health Service for medical and scientific advice and recommendations.

Section 210 of P.L. 97-35 (effective October 1, 1981) provided that Medicare Part B payment under Section 1861(s)(2) of the Social Security Act, and Medicaid payment under Section 1905(a)(12) of the Act, were to be prohibited for prescribed drugs for which the Secretary has issued a Notice of an Opportunity for a Hearing (NOOH) on a proposed order to withdraw the drug from the market because the FDA has determined that the drug is less than effective for all indicated uses.

Confidentiality and Disclosure - HCFA prepared a final rule to change the location of certain regulations that concern the availability of Medicare information and records to the public from 20 CFR Part 422 to 42 CFR Part 401. HCFA changed its policy to allow disclosure of identifiable information without beneficiary consent to an individual or organization for epidemiological and other research and statistical purposes provided certain specific criteria and safeguards are met.

Provider Reimbursement Appeals - Section 955 of P.L. 96-499 amended Section 1878(f)(1) of the Social Security Act. The amendments make it possible for a provider that requests and has the right to obtain a hearing by the Provider Reimbursement Review Board (PRRB) under Section 1878(a) of the Act, to bypass the hearing and obtain judicial review of any action of the fiscal intermediary that involves a question of law or regulations relevant to the matters in controversy, whenever the PRRB determines that it is without authority to decide the question. The PRRB may determine that it does not have the authority, either on its own motion or upon the request of a provider.

HCFA has prepared a regulation detailing the procedures by which a provider may bypass the PRRB hearing.

Waiver of Liability Procedures Applicable to Erroneous Placement in an Inappropriately Certified Bed of a Participating Hospital or Skilled Nursing Facility (SNF) - Section 956 of P.L. 96-499, effective January 1, 1981, amends Section 1879 of the Social Security Act to permit program payment for an otherwise qualified Medicare beneficiary who is precluded from Medicare reimbursement solely because services were received in a part of an institution not qualified to provide the appropriate level of care. This provision applies to hospital and SNF levels of care.

Quality and Appropriateness of Care - A major goal of the Medicare program is to assure that its beneficiaries receive appropriate health services. Additionally, HCFA must ensure that services are necessary and performed at the most economical level consistent with good care.

Standards and Certification - Facilities providing health care services to Medicare beneficiaries must meet certain health and safety standards before they can receive Medicare reimbursement. Annual surveys are conducted by States under contract with the Department. However, the Social Security Act allows the privately run Joint Commission on Accreditation of Hospitals (JCAH) and the American Osteopathic Association's (AOA) standards and certifications to be considered as having met the Federal government's requirements. Therefore, States only survey those hospitals not accredited by JCAH or AOA and will, on a sample basis, conduct surveys on JCAH or AOA hospitals in order to validate that the surveys conducted by those associations continue to meet Medicare requirements.

Generally, the Federal Standards and Certification program is responsible for establishing and updating Federal health care standards, developing State survey procedures, and monitoring surveys and enforcement. This report includes discussion of major FY 81 activities in the following areas:

Hospital Conditions of Participation

Skilled Nursing Facility/Intermediate Care Facility Conditions of Participation

Survey and Certification Procedures (Subpart S)

Fire Safety Evaluation System

Conditions of Coverage for Suppliers of Laboratory Services

JCAH Validation Process

Professional Standards Review Organizations (PSROs) - As a result of the Omnibus Budget Reconciliation Act of 1981, PSRO's were no longer required to perform Medicaid reviews, as of October 1, 1981 but were still required to review those health services provided to Medicare patients. State Medicaid agencies were given the option of contracting with PSRO's for the continued performance of medical or utilization review functions and therefore be deemed to meet the Utilization Control (UC) requirements for those services and providers that the PSRO reviews, or States could assume direct responsibility for assuring the UC required by Title XIX of the Social Security Act. Any agreements entered into with the PSRO prior to October 1, 1981 continued to exist until the next renewal date of the agreement or in accordance with the instructions in the existing grant.

Second Surgical Opinion Program - In FY 78, HCFA began a major consumer information campaign to encourage all Americans to seek a second opinion before undergoing nonemergency surgery. The campaign was particularly directed toward Medicare and Medicaid beneficiaries. In FY 80, public service announcements promoting the second opinion program and publicizing the national toll-free number (800-638-6833) were distributed to 730 television stations and over 6,000 radio stations. In FYs 80 and 81, nearly seven million brochures entitled "Thinking of Having Surgery? Think about getting a second opinion." were distributed.

INCREASING HMOs ENROLLMENT BY MEDICARE BENEFICIARIES

Health Maintenance Organizations are a growing alternative to traditional forms of health care delivery. An HMO is an organization which provides its members comprehensive health services, without regard to frequency or extent of services, in return for predetermined, fixed premiums paid by members. During FY 81, 17 HMOs signed contracts to enroll Medicare members. This brought the total of contracting HMOs to 59. Medicare membership in HMOs increased during FY 81 from 66,238 to 90,198 or approximately 36 percent.

FRAUD AND ABUSE CONTROL ACTIVITIES

During FY 79, the responsibility for full scale fraud investigations and prosecutions was transferred to the Department's Office of the Inspector General. As a result, HCFA began to focus attention on integrity reviews, abuse case processing, administrative sanctions activities, payment reviews, and increased efforts in various types of validation reviews.

In FY 81, 29,623 integrity reviews were processed by HCFA regional offices and Medicare contractors. Overpayments identified as a result of these reviews total $4.0 million. Additionally, 2,639 full scale abuse cases were processed by HCFA regional offices and Medicare contractors. As a result of these cases, $17.6 million in overpayments was identified.

In FY 81, action was taken to suspend 17 physician/practitioners from participation in the Medicare program. Exclusion actions were taken against 21 providers, practitioners and/or other health care suppliers.

During FY 81, HCFA continued its extensive validation review program to detect fraud, abuse, and waste among providers, and to identify and correct inappropriate and potentially wasteful policies and procedures. During FY 81, 128 final validation reports were produced which identified total Medicare overpayments or other program savings of $53.7 million.

BENEFICIARY SERVICES

In December 1979, the Office of Beneficiary Services was established within HCFA. The goal of this office is to enhance beneficiary understanding of HCFA programs; to coordinate central office and regional office beneficiary related activities; and to initiate and promote innovative techniques for dissemination of program information. A wide variety of information and programmatic initiatives were undertaken in FY 81. Primary projects included:

A Medigap training program to better inform Medicare beneficiaries about purchasing private supplemental health insurance. A total of 250 training sessions were held throughout the 50 States, the District of Columbia and Puerto Rico. Approximately 13,000 attendees have received training through this program.

A complete revision of Your Medicare Handbook was initiated.

One million copies of Recent Changes in Medicare, describing the latest and most important legislative changes affecting the Medicare population, were distributed.

The second edition of the directory, Where To Get Answers at HCFA, designed for use by SSA district offices, State agencies, and beneficiary representatives, was produced.

Liaison activities were conducted with beneficiary organizations to improve communications.

Through beneficiary casework, special beneficiary inquiries and problem cases were answered.

A HCFA Beneficiary Service Award was given as an incentive to develop innovative ideas, resources, and programs in assisting beneficiaries.

MEDIGAP

The Medigap law, enacted in 1980, was designed to encourage States to adopt minimum standards for Medicare supplement or Medigap policies. It provides for the creation of the Supplemental Health Insurance Panel, the establishment of a Federal Voluntary Certification Program, and the establishment of Federal

criminal penalties. It also provides for information to be supplied to beneficiaries, enabling them to evaluate the value of Medicare supplemental policies. The Federal Voluntary Certification Program is applicable only to those insurers in States not having a Panel approved regulatory program.

Since the Voluntary Certification Program became effective July 1, 1982, there has been insufficient opportunity to accumulate extensive data concerning the effectiveness of certification procedures and the impact this program is having on the types, market share, value, and cost of insurance sold. Also, due to the limited time HCFA has been involved in this program, definitive recommendations concerning the program cannot be formulated at this time. After an additional year of experience with the Medigap program, HCFA will be in a better position to provide definitive recommendations.

RESEARCH, DEMONSTRATIONS AND STATISTICS

Research and experimentation in support of the Medicare program is authorized in the Social Security Act and the Social Security Amendments of 1967 and 1972, as well as in the National Health Planning and Resources Development Act of 1972.

HCFA studies and develops ways to promote efficiency and quality in the Medicare and other HCFA programs. It assesses the impact of HCFA programs on health care costs, program expenditures, beneficiary access to services, health care providers, and the health care industry. These research and demonstration projects test and evaluate alternatives to present reimbursement, coverage, eligibility and management policies of the Medicare program.

During FY 81, HCFA conducted research, demonstration and evaluation projects in the following nine program areas:

Beneficiary Impact and Awareness

Health Systems Organization

Hospital Costs

Industrial Organization and Reimbursement

Integrated Data Management Systems

Long Term Care

Physician Reimbursement

Program Evaluation

Quality and Effectiveness

Following the section on the research, demonstration and evaluation projects, there is a brief discussion of HCFA's Office of Research, Demonstration and Statistics' (ORDS) data base and statistical activities. There is also a discussion of ORD's publication program. Copies of the ORD publications are available from ORD Publications, Room 2-E-6 Oak Meadows Building, 6340 Security Boulevard, Baltimore, Maryland 21207.

LEGISLATION ENACTED IN FY 81

There were five significant pieces of legislation signed into law during FY 81. They included:

P.L. 96-473: Amendments to the Social Security Act for the Retirement Test. Provided that certain persons not be required to establish entitlement to Medicare Hospitalization (Part A) simultaneously with entitlement to Social Security Old-Age or survivors Insurance.

P.L. 96-499: Omnibus Reconciliation Act of 1980. Provided coverage for unlimited home health care visits under Medicare by eliminating both the Part A requirement of three days prior hospitalization and the Part B $60 deductible prerequisite, and also allows proprietary home health agencies in all States to participate in Medicare.

P.L. 96-537: Indian Health Care Amendments of 1980. Authorized the Secretary to make grants to or contracts with tribal organizations to improve access of Indians to health services.

P.L. 96-611: Medicare Coverage of Pneumococcal Vaccine. Provided coverage under Part B of Medicare for Pneumococcal vaccine and its administration.

P.L. 97-35: Omnibus Budget Reconciliation Act of 1981. Increased the Medicare Part A and B deductibles; reduced the Medicare hospital nursing differential from 8.5 percent to 5 percent; repealed the periodic interim payments delay passed in 1980; gave the Secretary greater discretion in managing the PSRO program, and most importantly, in terminating ineffective PSROs.

PART II

END STAGE RENAL DISEASE
Calendar Year 1981

The End-Stage Renal Disease (ESRD) part of the report is prepared in accordance with Section 1881(g) of the Social Security Act, and addresses the 15 specific requests for data enumerated. It covers activities related to the care of ESRD patients that took place in calendar year 1981, and includes information on the number of patients utilizing the various forms of treatment, the costs involved, discussions of cost savings experiments, and basic kidney research conducted during the year.

The total dialysis population increased by 12.5 percent in 1981, to 58,924 from 52,364 in 1980. The home dialysis population increased by 23.7 percent, to 9,474 from 7,661 in 1980. The net increase in home patients was due largely to the growth of continuous ambulatory peritoneal dialysis (CAPD) from 2,334 patients in 1980 to 4,347 patients in 1981. CAPD now accounts for 45.9 percent of all home patients. When the figures for home dialysis were arrayed by Network, the home dialysis population ranged from 6.8 percent to 43.9 percent. Thirty Networks showed a net increase over 1980 in the percentage of patients treated at home, and two showed decreases. At the end of 1981, the home dialysis population accounted for 16.1 percent of the total dialysis population, a net increase of 1.5 percent over 1980.

The number of patients receiving a transplant increased by 4.4 percent in 1981, to 4,878 from 4,671 in 1980. Patients transplanted in 1981 accounted for 7.7 percent of the total ESRD population, a net decrease of 0.5 percent over 1980. The number of patients transplanted by Network in 1981 ranged from a low of 12 to a high of 312. Sixteen Networks showed a net increase over 1980 in the number of ESRD patients transplanted, 14 showed decreases, and 2 showed no change. The percentage of total transplants performed with kidneys from living related donors increased to 29.8 percent from 27.1 percent in 1980.

Total expenditures for services rendered during calendar year 1981 were almost $1.4 billion, based on bills posted as of July 2, 1982. The 1981 figure will increase as bills continue to be posted. The average payment rate for both hospital and freestanding dialysis units for dialysis was $148 per treatment without physicians' fees. The average kidney acquisition charge in 1981 was $7,562 for a living related donor kidney and $7,172 for a cadaveric kidney. The average estimated kidney acquisition costs were $7,561 and $7,125, respectively. The average estimated cost for a transplant was $19,474 in 1981.

This annual report on Medicare, the fifteenth, describes program performance from October 1, 1980 through September 30, 1981. For the first time, two additional reports mandated by Congress are included: the effectiveness of Medigap, a program enacted in 1980 establishing voluntary certification procedures for Medicare supplemental health insurance policies, and the end stage renal disease (ESRD) annual report for Calendar Year 1981. The Medigap program is discussed in Part I, Chapter II and the ESRD report is Part II of this document.

In fiscal year 1981, the Federal government continued to place high priority on combating inflation and reducing public expenditures. Attention to these objectives is reflected throughout this report by the considerable emphasis on increasing operational efficiency of Medicare and improving the effective use of public funds for this major national health care program.

PART I

Annual Report on Medicare

Including a Report on the Medigap Program

CHAPTER I. PROGRAM OPERATIONS

A. BENEFICIARIES

As of January 1, 1981, a total of 28.8 million beneficiaries were entitled to Medicare: 25.8 million aged persons and 3.0 million disabled persons under 65. Of the total beneficiaries, 28.4 million had hospital insurance (Part A), and 27.6 million had enrolled in the voluntary medical insurance program (Part B). Of beneficiaries age 65 or over, 95 percent were covered by both Part A and Part B while 92 percent of disabled beneficiaries were covered by both parts. Of all beneficiaries, 28.2 million resided in the United States, representing 12 percent of the U.S. resident population.

The number of aged persons entitled to Medicare as of January 1981 increased by 500,000 (from 25.3 million to 25.8 million) over the January 1980 enrollment. This increase reflects the continuing trend of the last decade in an annual net growth of over 2 percent in the age 65 and over segment of the U.S. population. In addition to growth in the number of aged, the average age of beneficiaries also increased. The proportion of beneficiaries age 85 and over increased from 7 percent in 1970 to 9 percent in 1980. In addition, there has been a 10 percent decline in the death rate of the 65 and older group from 1970 to 1980. The death rate in 1970 was 5,892 per 100,000 as compared to 5,291 per 100,000 in 1980. These factors contribute to more intensive use of Medicare-covered health care services over a longer period of time.

B. HEALTH CARE RESOURCES

As of July 1, 1981, there were 6,736 hospitals with 1,147,324 beds participating in Medicare, down from 6,777 hospitals with 1,149,997 beds as of July 1, 1980. Included in the participating hospitals were 6,065 short stay hospitals, 412 psychiatric, and 259 other long stay institutions. Eighty-seven percent of the total number of beds are in short stay hospitals, 11 percent in psychiatric institutions, and 2 percent in other long stay institutions.

As of July 1, 1981, there were 5,258 skilled nursing facilities with 457,692 beds participating in Medicare, up from 5,052 facilities with 436,007 beds as of July 1, 1980. Participating facilities include skilled nursing facilities, separately organized extended care units in hospitals, and some separate skilled nursing units connected with residential homes for the aged.

The number of home health agencies participating in the Medicare program rose from 2,924 to 3,110 in the 12-month period ending July 1, 1981.

As of July 1, 1981, a total of 3,484 independent laboratories had been approved for Medicare reimbursement, up slightly from 3,447 12 months earlier. There are 21 reimbursable categories of clinical tests or procedures. Laboratories can be reimbursed by Medicare only for those tests which they are certified to perform.

Under the renal disease program, as of July 1, 1981, 1,111 facilities or units provide services to program beneficiaries requiring maintenance dialysis or kidney transplant. Of the participating providers, 666 were hospital-based or operated. Of this number, 393 were hospital units certified as Renal Dialysis Centers only and provide the full spectrum of diagnostic, therapeutic, and rehabilitative services required for the care of dialysis patients; 7 were hospital units approved as Renal Transplant Centers only and provide transplantation and other medical and surgical specialty services required for the care of transplant patients; 149 were hospital units certified as both Renal Transplant Centers and Renal Dialysis Centers; 106 were units approved to furnish dialysis services; and 11 were hospitals certified to provide backup dialysis services. The remaining 445 facilities were certified as free-standing, dialysis-only facilities.

A new category of health care facility was added by the Rural Health Clinic Services Act of 1977 (P.L. 95-210). By July 1, 1981, 427 rural health clinics had been certified to participate in the programs.

C. BENEFIT PAYMENTS

During FY 81, Medicare paid $28.9 billion in benefits under hospital insurance (Part A) and $12.3 billion under medical insurance (Part B). These amounts represent an increase of 22 percent over FY 80 payments of $23.8 billion and $10.1 billion respectively. Almost half of the amount of the increase resulted from increases in hospital costs and higher physician fees recognized by the program. Studies discussed in Chapter III of this report indicate that price inflation contributes most to these increases. The remainder of the increases were due to such factors as utilization of more expensive technology in health care delivery, increasing rates of utilization of services, and increases in both the number of aged beneficiaries and the proportion of persons aged 75 or older within the aged population. The latter group requires more medical services and more frequent hospitalization for longer periods of stay.

Inpatient hospital care accounted for 96 percent of all Part A payments. The program also covers convalescent care after a hospital stay of at least three days, either by transfer to a skilled nursing facility or through home health services. (Beginning July 1, 1981, a three day hospital stay was no longer needed to qualify for home health services under Part A.) Benefit payments for these two levels of extended care services represented 4 percent of total Part A payments.

Medical insurance payments were predominantly for physician and Part B suppliers' services, accounting for 71 percent of Part B payments. The next highest reimbursed category was outpatient services (19 percent), followed by inpatient services furnished by radiologists and pathologists (5 percent), group practice prepayment plans (2 percent), home health services (2 percent) and laboratory services (1 percent).

Inpatient Hospital Services

During FY 81, approximately 111 million inpatient hospital days were approved for payment. The aged accounted for 88 percent of the total, while the remaining 12 percent were for the disabled. The rate of covered days of care per 1,000 enrollees was about 3,800 for the aged and 4,500 for the disabled. In FY 81, hospitals were paid $27.8 billion for Part A benefits, 96 percent of all Part A payments.

Skilled Nursing Facility Services

During FY 81, 8.3 million days in skilled nursing facilities were approved for payment. Eight million were incurred by the aged and 0.3 million by the disabled. This represents an annual rate of 310 covered days per 1,000 aged enrollees and 100 covered days per 1,000 disabled enrollees. Benefits paid totaled approximately $404 million or 1.4 percent of total Part A payments in FY 81.

Home Health Services

Almost 24 million visits provided by home health agency personnel were approved for payment during FY 81, an average of 850 visits per 1,000 aged enrollees and 625 per 1,000 disabled enrollees. Home health service benefit payments under both hospital and medical insurance totaled $675 million for FY 81, representing 2 percent of total Medicare benefit payments.

Physician and Other Part B Supplier Services

For FY 81, medical insurance payment for physicians (excluding inpatient radiology and pathology services) and other Part B suppliers totaled $8.8 billion, about 71 percent of total Part B payments.

Radiology and Pathology

Payments in FY 81 for inpatient services furnished by radiologists and pathologists amounted to $670 million, or 5 percent of Part B payments.

Other Medical Services and Supplies

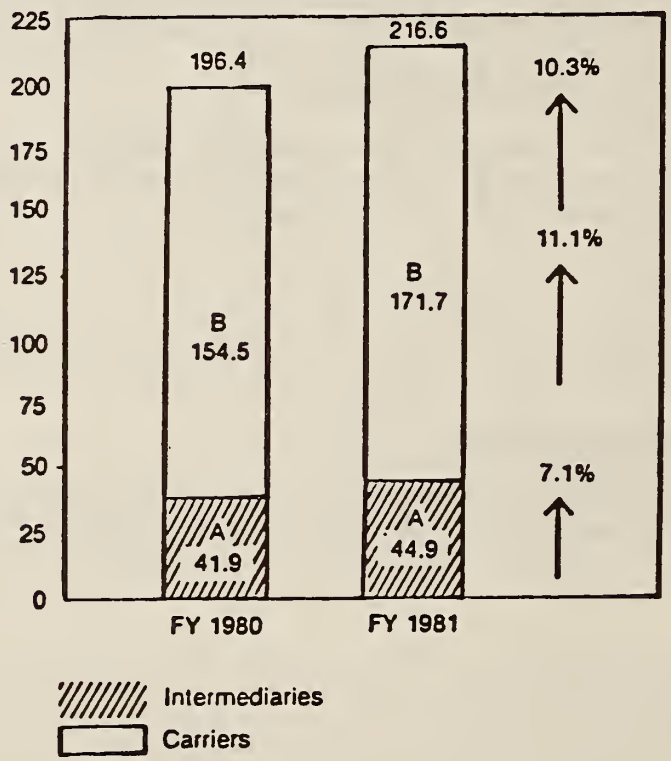
For FY 81, approximately $247 million was paid to group practice prepayment plans, $2.2 billion for outpatient services and $145 million for independent laboratory services.

D. CLAIMS PROCESSING PERFORMANCE

Claims receipts -- The volume of Medicare claims received continued to increase through FY 81. Contributing to this upward trend were the steady increase in the number of covered beneficiaries, increased utilization of covered services, and the tendency of beneficiaries to submit claims for each bill or service received rather than accumulating them for periodic submittal. Claims received by Part A intermediaries increased to 44.9 million in FY 81, an increase of 7.1 percent over FY 80 experience. Claims received by carriers rose at a rate of 11.1 percent, totaling 171.7 million in FY 81. Overall, the increase in Medicare claims was 10.3 percent.

Claims Received by Medicare Contractors

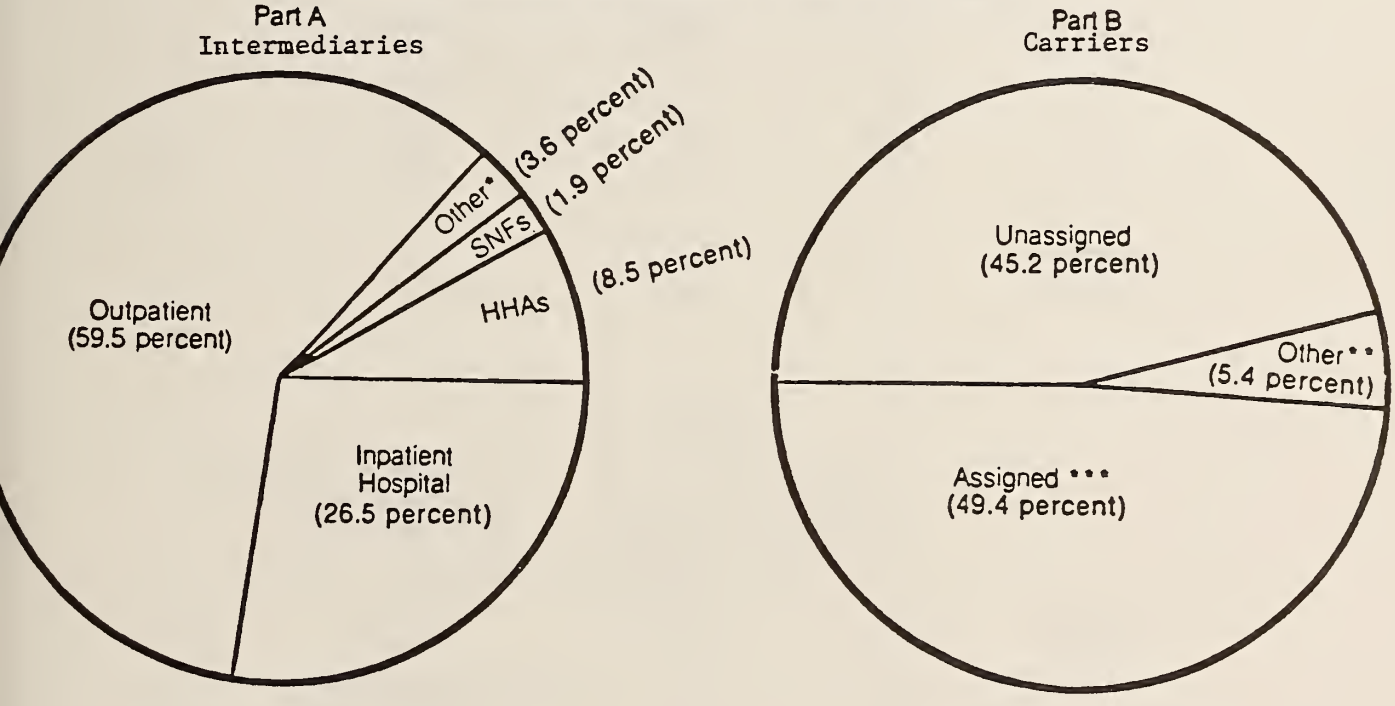
(millions)



Distribution of Claims -- The majority of claims received by intermediaries during FY 81 represented requests for payment for outpatient services provided Medicare beneficiaries. These claims accounted for 59.5 percent of the total received by intermediaries. Inpatient hospital claims accounted for 26.5 percent of the receipts while claims for home health agency and skilled nursing facility services represented 8.5 percent and 1.9 percent, respectively. The remaining 3.6 percent were claims submitted for ancillary and other miscellaneous services payable under Part B.

Claims received by carriers during FY 81 were nearly equally divided between those submitted by physicians and suppliers on assignment (49.4 percent) and those submitted unassigned by beneficiaries (45.2 percent). The remaining claims (5.4 percent) were those submitted by provider-based physicians and group practice prepayment plans. In comparison to FY 80 experience, the percent of assigned claims to total claims showed a slight increase of 0.9 percentage points.

Distribution of FY 81 Receipts by Type of Claim



* Ancillary and other miscellaneous services payable under Part B.

** Claims for services provided by provider-based physicians and group practice prepayment plans, who do not bill patients directly.

*** This represents the assignment rate measured against all claims. When measured only against claims in which patients are billed directly (i.e., excluding the 5.4 percent of claims for provider-based physician services and group practice prepayment plan services), the assignment rate in FY 81 was 52.2 percent, the figure usually quoted as the Medicare assignment rate. This is a slight increase over FY 80 assignment rate of 51.4 percent.

Claims Processing Timeliness -- When compared to FY 80 experience, the timeliness measures of contractor claims processing performance in FY 81 indicated a slight improvement for both Part A intermediaries and Part B carriers. The average processing time for intermediaries decreased from 10.0 days to 9.5 days, although the average monthly percentage of bills pending over 30 days increased slightly from 16.0 percent to 16.3 percent. Carriers showed a decrease in yearly average claim processing time from 13.0 days to 12.2 days. Over the same time period the average monthly percentage of claims pending over 30 days for carriers decreased from 14.4 percent to 13.9 percent.

Intermediaries

	Contractor Processing Time (Mean Days)		Percent of Claims Pending Over 30 Days	
Quarter	FY 80	FY 81	FY 80	FY 81
1	9.4	9.3	15.8	16.5
2	10.6	9.5	15.4	13.9
3	10.1	9.5	15.8	17.6
4	9.9	9.8	17.1	17.2
Yearly Average	10.0	9.5	16.0	16.3

Carriers

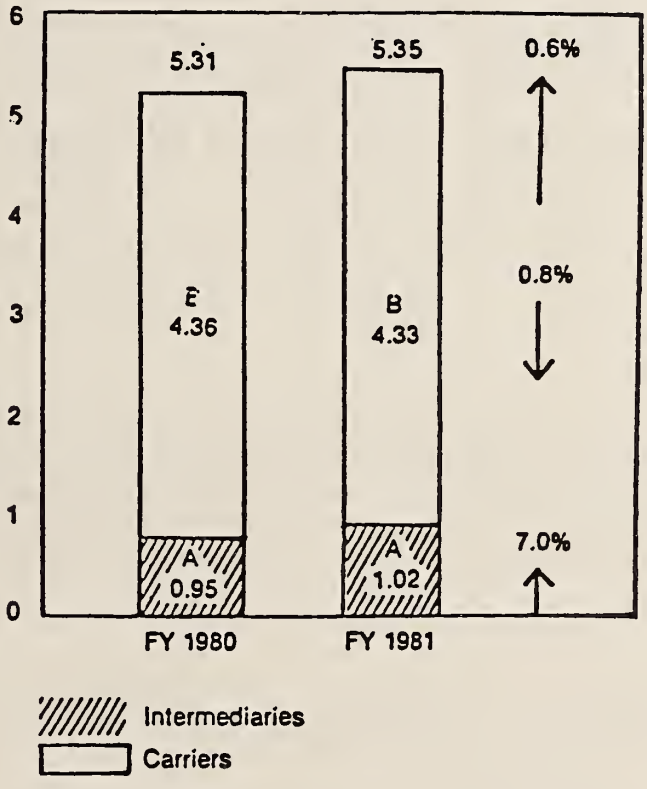
	Contractor Processing Time (Mean Days)		Percent of Claims Pending Over 30 Days	
Quarter	FY 80	FY 81	FY 80	FY 81
1	12.9	11.9	15.5	13.0
2	14.6	13.8	15.0	13.7
3	12.2	11.6	13.1	15.2
4	12.3	11.5	14.0	13.4
Yearly Average	13.0	12.2	14.4	13.9

Claims Pending

Intermediaries experienced an increase in the volume of pending claims in FY 81 compared to FY 80, with a 7.0 percent increase to 1.02 million claims. Part B carriers' pending claims in FY 81 showed a slight decrease of 0.8 percent from FY 80, when there were 4.33 million pending claims.

Claims Pending for Medicare Contractors

(millions)



E. CONTRACTOR ADMINISTRATIVE COST EXPERIENCE

Intermediaries -- The FY 81 intermediary workload increased 6.9 percent over FY 80, whereas the total cost (excluding audit) increased 7.1 percent. Person years for operations (excluding audit) decreased 6.4 percent in 1981 which, in view of the higher workload, resulted in a 7.1 percent increase in productivity per person year. (See Appendix D for basic data.)

The unit cost for all operations increased 9 cents, although the unit cost for operations (excluding audit) increased by 1 cent. The difference reflects an increase of 13.2 percent in audit costs. (See Appendix D for basic data.)

	FY 80	FY 81	Net Change Increase (Decrease)	Percent Change Increase (Decrease)
Workload (Bills Processed)	39,789,346	42,539,836	2,750,490	6.9
Total Cost	$216,037,001	$234,615,400	$18,578,399	8.5
Provider Audit	60,905,505	68,425,300	7,519,795	12.3
Total Cost (Ex. Audit)	$155,131,496	$166,190,100	$11,058,604	7.1
Unit Cost	$5.43	$5.52	.09	1.6
Unit Cost (Ex. Audit)	$3.90	$3.91	.01	.2

Carriers -- The unit cost increased by 5 cents during FY 81. The increased unit cost reflects a workload increase of 11.3 percent and a total cost increase of 13.2 percent. Contributing to the higher unit cost was the fact that productivity increased 4.8 percent, while the personal service cost per person year increased by 9.4 percent. (See Appendix D for basic data.)

	FY 80	FY 81	Increase (Decrease)	Percent Increase (Decrease)
Workload (Claims Processed)	152,312,647	169,541,671	17,229,024	11.3
Total Cost	$398,043,342	$450,537,700	$52,494,358	13.2
Unit Cost (Claims)	$2.61	$2.66	$0.05	1.9

Appendix D presents a five year trend analysis of contractor administrative cost factors and productivity improvements.

F. PROGRAM FUNDING

Under the Social Security Act, the Federal Hospital Insurance Trust Fund and the Federal Supplementary Medical Insurance Trust Fund are administered by two Boards of Trustees, each comprised of the same three members who serve in an ex officio capacity. The Secretary of the Treasury is designated by law as the managing trustee of both funds. The other members of the Board are the Secretary of Labor and the Secretary of Health and Human Services. The Administrator of the Health Care Financing Administration serves as Secretary of both Boards. The two Trust Funds were established on July 30, 1965, as separate accounts in the U.S. Treasury to hold the amounts accumulated under the respective programs. The Board of Trustees issues annual reports on the status of the two Trust Funds.

The primary source of hospital insurance (Part A) financing (92 percent) is contributions, based on earnings, by workers and their employers, and by self-employed individuals. The remaining eight percent is derived from general revenues for certain uninsured individuals who attained age 65 before 1975, premium payments for voluntarily enrolled individuals, transfers from the Railroad Retirement Board, military service credits, Professional Standards Review Organizations, Maternal and Child Health, and interest on accumulated funds.

Supplementary medical insurance (SMI or Part B) is financed by three sources: (1) premium payments from enrollees, (2) contributions from general revenues, and (3) interest on trust fund accumulation.

When the SMI trust fund was initially established in 1966, the Government contribution from general revenues was equal to the premium income collected from beneficiaries under a 50-50 matching formula. Effective in 1973, under a legislative amendment, year-to-year increases in beneficiary premiums were limited to the percent by which general Social Security benefit levels had increased in the preceding year. Since July 1973, the Government contribution has increased significantly. In FY 81, the Government contributed 70.3 percent of program income and the beneficiary contribution was 26.7 percent of program income. Three percent of the income resulted from interest accumulated by the trust fund. The increase in the Government's contribution can be attributed to (1) the 1973 legislative amendment, and (2) the fact that the cost of the Part B program has increased at a rate considerably above the general cost of living adjustment applied to Social Security benefit increases. Some factors contributing to the rise in the cost of the Part B program are (1) inflation of medical prices, (2) utilization of more expensive technology in health care delivery, (3) increasing rates of utilization of services, and (4) increases in both the number of aged beneficiaries and the proportion of persons aged 75 and older within the aged population. Additionally, coverage of the disabled became effective in July 1973 at the same premium rate as for beneficiaries over 65, even though medical care costs for the disabled are greater.

More detailed information about the status of the Hospital Insurance and Supplementary Medical Insurance Trust Funds, showing income, disbursement and future projections are contained in the Annual Reports submitted to the Congress by the Boards of Trustees of the two Funds.

CHAPTER II. PROGRAM ADMINISTRATION

A. SUMMARY OF ADMINISTRATIVE STRUCTURE

The overall responsibility for administration of Medicare is vested by law in the Secretary of Health and Human Services. The statute also provides for significant participation in certain areas of administration by private organizations and public agencies.

Within the Department of Health and Human Services, primary responsibility for administering the Medicare program is assigned to the Health Care Financing Administration (HCFA). Special responsibilities in connection with health care standards of Medicare have been assigned to the Public Health Service. The Office for Civil Rights of the Department is responsible for assuring necessary conformance by participating health care facilities with Title VI of the Civil Rights Act of 1964.

Role of the Health Care Financing Administration - The Health Care Financing Administration negotiates and administers agreements with (1) the intermediaries and carriers which perform payment and other program functions, (2) the State agencies which certify health facilities for participation in the program, and (3) hospitals and other institutions which provide services for which the program makes reimbursement. HCFA enrolls Medicare beneficiaries and ensures that a Medicare card is mailed to each entitled beneficiary. It bills and collects premiums from direct-paying beneficiaries and third party payors. It maintains computerized master records which provide current information about beneficiary eligibility, deductible status, and utilization. HCFA also develops reimbursement principles and guidelines, participates with the Public Health Service in the formulation of the conditions of participation, formulates Medicare regulations, develops program policy and procedural instructions, and performs the basic recordkeeping and data processing functions required for administration of the program. It determines and reconciles payment liability of group health plans. Additionally, HCFA assures the quality, appropriateness and necessity of services for program beneficiaries.

Role of the Social Security Administration (SSA) - With the establishment of HCFA on March 8, 1977, responsibility for Medicare activities was transferred from SSA. However, by agreement, SSA continues to perform some functions. Chief among these are: (1) District Office Services - Applicants for Medicare continue to make applications for Medicare coverage, as well as make inquiries and file appeals, to SSA District Offices. SSA District Office staff also respond to inquiries regarding Medicare, process beneficiary appeals, explain Medicare eligibility requirements, make eligibility determinations, obtain required proofs, and issue notices of Medicare eligibility; (2) Computer Support - SSA provides computer resources and operational personnel to process HCFA programs; (3) Appeals Function - Certain appeals functions are handled by SSA. These include beneficiary appeals (Part A) where more than a statutory minimum is at issue.

Role of the Public Health Service - The Department's Public Health Service (PHS) acts as a valuable resource in the professional health aspects of the Medicare program. PHS participates with the Health Care Financing Administration in formulating the conditions of participation for providers of services, provides assistance to the State agencies in carrying out their Medicare responsibilities, supports and evaluates experimental approaches to utilization review, and provides professional advice on many technical and medical aspects of program administration.

Role of the Office for Civil Rights - Title VI of the Civil Rights Act of 1964 provides that no institution, agency, or activity receiving Federal financial assistance may engage in discriminatory practice on the basis of race, color, or national origin. Thus, before any hospital, skilled nursing facility or home health agency may be a participating provider under Medicare, their compliance with the provisions of Title VI must be assured. The Office for Civil Rights is responsible for assuring compliance with Title VI.

Role of the State Agencies - The law requires that, wherever possible, the Secretary uses the services of appropriate State or local health agencies or other appropriate State or local agencies in determining whether providers of services and independent laboratories meet the conditions for participation in the Medicare program. All 55 jurisdictions (including the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and American Samoa) have designated agencies -- in most instances State health agencies -- to perform this function.

In carrying out their responsibilities under the health insurance program, the State agencies conduct field surveys of institutions and agencies to determine the extent to which these facilities meet the applicable conditions of participation. They also undertake periodic resurveys of participating facilities to determine whether they continue to meet such conditions and provide consultative services to facilities experiencing difficulties in meeting the participation requirements. The agencies identify non-participating hospitals which can be reimbursed under the program for emergency services, and coordinate activities under the health insurance program with activities conducted under medical assistance programs. The State agencies are reimbursed for the costs of activities they perform in the program, including related costs of administrative overhead and staff.

Role of the Intermediaries - Participating hospitals, skilled nursing facilities, and home health agencies may either receive program reimbursement through a fiscal intermediary or receive payment directly from the Government. Most providers have chosen to deal through intermediaries. Under agreements with the Secretary of Health and Human Services, the intermediary is responsible for determining whether services are covered, the reasonable costs of services provided to beneficiaries, and for reimbursing providers for these costs on behalf of the program. In addition, the agreements authorize the intermediary to provide consultative services to providers, to make audits of provider records, and perform related functions. All agreements also require that the intermediary must assist providers in establishing and applying safeguards against the unnecessary use of services covered under the program. As of September 30, 1981, nine insurers were operating as fiscal intermediaries on behalf of over 14,000 participating providers. The insurers include the Blue Cross Association (with subcontracts to 59 Blue Cross plans) and 8 commercial insurers (Appendix A). Submitting bills directly to HCFA were: 223 hospitals, 83 skilled nursing facilities, 484 home health agencies, 27 outpatient physical therapy providers, 240 comprehensive health centers, 414 Federal hospitals, 7 emergency hospitals, 35 hospitals providing services to migrant farm workers and 7 free-standing end-stage renal disease dialysis facilities. In addition to this regular intermediary workload, HCFA serviced 1,649 other providers involved in program demonstration projects. HCFA also provided accounting and reimbursement services (but not claims processing services) for 34 Kaiser-Permanent facilities nationally.

Role of the Carriers - To make program payments under the medical insurance program, the Secretary is authorized to enter into contracts with organizations already engaged in providing, paying for, or reimbursing the cost of health services under group insurance policies or similar group arrangements in return for premiums or other periodic charges. Applying Federal statutes, regulations and instructions, the selected carriers determine whether services are covered and the amounts to pay physicians and suppliers for services rendered under the program and make payments for such services on behalf of the program. Under the terms of their contracts with the Secretary, they are required to assist in the application of safeguards against the unnecessary utilization of services, and to serve as a channel of communication for information relating to the administration of the program.

As of September 30, 1981, there were 26 Blue Shield plans, 12 insurance companies, 1 data processing company, and 1 State agency operating as carriers (Appendix B).

B. ACHIEVING MORE EFFICIENT INTERMEDIARY AND CARRIER PERFORMANCE

Essentially, beneficiaries and the health community, as well as the public at large, judge the performance of Medicare by the performance of intermediaries and carriers. Contractors' effectiveness in processing claims, in communicating program policies and procedures to the public and in establishing relationships with the health community, shapes the public and professional response to the program.

Within general guidelines issued by the Health Care Financing Administration, the intermediaries and carriers must develop effective administrative mechanisms for achieving required program results. This has led to different patterns in the internal administration and operation of the intermediaries and carriers. Much of the success of Medicare, particularly its acceptance by the health community, is attributable to the opportunities presented by such an administrative pattern. Intermediaries and carriers can develop uniquely responsive mechanisms to meet the variable patterns in the nation's health care system.

Description of the Intermediary Claims Process - Basically, the intermediary claims process involves (1) determining the amount of program reimbursement due to providers for covered services they furnished Medicare beneficiaries, and (2) making periodic payment of those amounts to providers. Two aspects of the intermediary claims process deserve special note. First, program reimbursement to providers is payment for the reasonable costs of furnishing covered services to the aggregate of beneficiaries receiving such services from the provider over a fiscal period (usually the provider's accounting year). It is not payment on behalf of each beneficiary for the covered services he receives as an individual patient. Thus, in the intermediary claims process, the provider, rather than the beneficiary, submits the claim. Each claim, in effect, is a bill record of services rendered, which is accumulated with all other such records from that provider until the end of its accounting period. At that time, a final cost settlement is made for all covered services rendered by the provider in that accounting period. Interim payments, in amounts related to bills submitted by the provider, are made throughout the accounting period, subject to adjustment on the final settlement for that period.

Secondly, there is no continuing relationship between a given intermediary and an individual beneficiary. A relationship is established only when a beneficiary receives services from a provider whose payments are handled by that intermediary. The beneficiary, at some other time, may receive services from a different provider served by a different intermediary. Thus, no single intermediary can maintain a full record of any beneficiary's use of hospital insurance services. In general, a beneficiary's current eligibility for provider services depends upon the extent of recent utilization of other provider services anywhere in the nation. Therefore, it is necessary to maintain a master utilization record so that prior utilization information can be made immediately available as needed. A master utilization record was established within the Health Care Financing Administration. Intermediaries are linked by wire communications for rapid query of the central records whenever eligibility and deductible status information is required.

The intermediary claims process for hospital insurance claims is summarized as follows: When a Medicare beneficiary is admitted to a participating hospital or skilled nursing facility, or begins a course of treatment based on a plan

of care from a home health agency, the provider sends the intermediary an admission or a start-of-care notice. The intermediary queries the Health Care Financing Administration's central record system for the patient's entitlement and deductible status, and remaining eligibility for benefits. The intermediary then advises the provider of the patient's eligibility for further benefits and his deductible status. Admission and start-of-care notices are sent to the Health Care Financing Administration by teletype or magnetic tape, or by direct magnetic tape to magnetic tape transmission over high-speed wires. Replies are usually sent to the intermediary on the second working day after a request for eligibility information has been made.

During the course of treatment, or after beneficiaries are discharged from the hospital or skilled nursing facility or complete a course of home health treatments, the provider submits claims to the intermediary. These claims are used to determine the level of interim payment due the provider, subject to final settlement at the end of the accounting period. Utilization data are forwarded to the Health Care Financing Administration to update the central records. Consequently, accurate information can be provided when replying to subsequent notices of admission or starts of home health care. As part of the updating process, explanation of Medicare benefit notices are sent to the beneficiaries to inform them of (1) services for which the program paid, and (2) the inpatient days or home health visits used in the current benefit period.

Description of Carrier Claims Process - Carriers reimburse reasonable charges on all claims for physicians' services and other covered medical services that are reimbursable on a charge basis. These claims may or may not be accompanied by copies of physicians' or suppliers' bills. If beneficiaries complete the claim form, they attach bills received. Bills are not attached if the claim is completed by a physician or supplier under assignment, or as an assistance to the claimant. Every claim received by the carrier requires two determinations in respect to each distinct service furnished the beneficiary. First, a determination must be made as to whether the service is covered. If the service is covered, a determination must be made as to the reasonable charge for that service. The efficiency of the carrier claims process is, therefore, greatly dependent upon securing detailed itemization of services rendered. Additionally, carriers must maintain accurate and current information concerning independent physician and supplier charge patterns for similar services to other patients in the same locality.

The basic steps in the carrier claims process are briefly summarized as follows: Upon receipt of claims, controls are established to assure proper disposition and to permit location of claims in the event of inquiry. Claims are reviewed for coverage of services and for completeness of information. They are then forwarded for determination of reasonable charges. The bill charges are compared with the customary charges of the physician for such services, and with the prevailing charge established in the locality for similar services. Increasingly, this comparison is accomplished through a computer process in order to handle the volume of claims expeditiously and economically.

It should be noted that each carrier receives claims for payment of medical insurance benefits provided by physicians or suppliers located within its geographic area. This continuity of relationship between the carrier and the physicians and suppliers in a geographical area is essential for the establishment and maintenance of customary and prevailing charge data.

As in the hospital insurance program, HCFA maintains a master eligibility and utilization record of all medical insurance enrollees. As an important step in the claims process, carriers must determine current claimant eligibility for benefits and whether the claimant has met the current year deductible. If the carrier has processed claims earlier in the year, its history file may have information regarding the status of the deductible. If not, the carrier queries the HCFA master record by transmitting essential identifying information and the amount of the reasonable charge. The same transmittal facilities available for intermediaries in Part A are used. HCFA, in updating the master record, responds to the query, generally within 24 hours. HCFA verifies eligibility and identifies the amount of the deductible remaining to be satisfied. The carrier then makes the appropriate payment to the physician or supplier if an assignment has been taken or, if not, to the beneficiary. In assignment cases, the explanation is sent to the physician or supplier with a copy to the beneficiary.

Contractor Performance Evaluation Program (CPEP)

As part of their claims adjudication and payment functions, Medicare contractors have a responsibility to identify, review, and refer for appropriate action, cases of suspected fraud and abuse. To assure that these responsibilities are uniformly met and to evaluate and increase the effectiveness of contractors in the detection and control of Medicare fraud and abuse, program integrity performance levels were established as part of the Contractor Performance Evaluation Program. This program involves the comprehensive annual review of all areas of contractor operations.

Cost Report Evaluation Program (CREP)

One major function of intermediaries is the audit and settlement of cost reports submitted by providers. The Medicare program's liability for covered services rendered to eligible beneficiaries results from this activity. During FY 78, the development of the Cost Report Evaluation Program culminated. It is a comprehensive review program designed to evaluate the quality of the settlement of provider cost reports by the nation's Medicare intermediaries.

(See chapter II, Section G. - Fraud and Abuse Control Activities, Subsection C. - Quality Assurance Programs, for a further discussion of CREP.)

Carrier Quality Assurance Program

The Health Care Financing Administration also maintains a formal carrier quality assurance program. The primary purpose of the program is to provide a statistically valid and objective procedure for evaluating Part B contractors' performances in the quality of claims processing.

See chapter II, Section G. - for a further discussion of the Fraud and Abuse Control Activities.

Contracting Initiatives and Experiments

Under Section 222 of P.L. 92-603, HCFA was granted experimental authority to test incentive contracting for intermediary and carrier administrative functions. Under an incentive contract, intermediaries and carriers are reimbursed on other than a cost related basis, rather than on actual costs incurred. They are at risk and may suffer monetary damages for failure to meet performance objectives. As a result of assuming the risk of non-performance, the intermediary's or carrier's internal management is responsible for improved efficiency and economy in operations. HCFA has taken action in the experimental contracts to assure that a continuing high level of service to Medicare beneficiaries and providers is maintained. In each experimental contract, performance requirements have been introduced which exceed those applied to the incumbent contractors reimbursed on a cost basis.

The use of incentive contracts on an experimental basis, authorized by Congress in 1972, is a departure from the basic statutory authority directing HCFA to reimburse contractors for the necessary and proper cost of administration of their contract duties. The experimental contracts utilize selected performance standards and existing quality control and performance review procedures and provide for the assessment of liquidated damages if the contractor fails to meet the standards established. Evaluations are made of actual performance against the standards. They are completed on a quarterly basis by regional office staff.

By FY 78, four experimental contracts were awarded. They involved the Maryland, Maine, Illinois, and upstate New York carrier service areas. The first was an annual prospectively negotiated fixed rate experiment with an incumbent carrier. The second, third, and fourth were competitively bid fixed-price contracts for Part B carrier geographic areas. The experimental contracts are being evaluated to determine the advantage and disadvantage of these forms of contracts. Although the evaluations are not complete, some preliminary observations have been made. The process of selection and subsequent negotiations of these experimental contracts has demonstrated the willingness of the Blue Cross Plans, the Blue Shield Plans and commercial insurance companies to operate in an incentive/risk environment and use specific standards to measure performance which may result in monetary damages being assessed for poor performance.

The Maryland Blue Shield contract was the first incentive-type reimbursement contract between HCFA and one of its Part B contractors. This experimental contract was an annual prospectively negotiated fixed rate experiment. This prospective fixed rate contractual agreement with Maryland Blue Shield followed a general solicitation to all Part B Medicare carriers for participation in a fixed rate experiment. Nineteen carriers responded to the general solicitation. The experimental fixed rate contract with Maryland Blue Shield was for a two year period (calendar years 1977 and 1978). In the experiment, Maryland Blue Shield realized net earnings in the first year of $274,161, which included a reduction in payments for failure to satisfy one of the performance requirements in the agreement. The second operational year (calendar 1978) of the contract had a negotiated fixed rate 8.1 percent below that which was negotiated in the first year of the contract. During 1978, the contractor sustained a net loss of $74,597, thus realizing a net gain over actual incurred costs of $199,564, or 2.64 percent, for the two years. As of January 1, 1979, Maryland Blue Shield reverted to a cost contract in accordance with the option contained in the experimental contract.

In 1977, the Union Mutual Life Insurance Company in Maine decided not to renew its Medicare Part B carrier contract but rather, to concentrate its efforts and resources on private business. This decision and the relatively small claims volume for Maine presented an ideal opportunity to test the competitive fixed price concept in Medicare under the experimental provisions of Section 222 of P.L. 92-603. Through competitive selection, Blue Shield of Massachusetts (BSM) was chosen to replace Union Mutual. BSM contracted with HCFA to process Part B medical insurance claims for fixed-price from December 1977 through September 1980. The contract held BSM to performance standards, including provisions for liquidated damages in the event of substandard performance. From the beginning of this contract through September 30, 1981, the amount of liquidated damages against BSM was $95,130 ($31,710 for FY 81). It further provided for contract termination in the event of substantially poor performance. The projected savings resulting from this experimental contract were $772,600. During FY 79, HCFA and BSM successfully negotiated a one year extension to the existing contract to process the Maine Part B workload for a price of $2,140,227. The total cost of the contract for the period December 1, 1977 - September 30, 1981 was $7,425,227.

A HCFA experimental fixed-price contract in Illinois is intended to test the effect of merging carrier service areas and the cost benefit effects of price competition in a medium claims volume service area. The service areas involved are Cook County, formerly serviced by the Health Care Service Corporation (HCSC), and the remainder of the State of Illinois, formerly serviced by Continental Casualty (CNA). The operational period of the fixed price contract is April 1979 to September 1983. The successful offeror for this contract was Electronic Data Systems Federal Corporation (EDSF), an organization that had not been a carrier in the Medicare program but had extensive experience in Medicare data processing. The projected savings to be realized by this experimental contract are $34,790,200. Some major operational difficulties were experienced during the first year for which liquidated damages were assessable ($2,037,750 in liquidated damages were assessed through September 30, 1981); however, the contractor has made significant progress in overcoming those difficulties.

In New York, HCFA selected a Part B carrier for the upstate New York area through a competitive process. The experimental contract is intended to test the cost benefit effect and operating efficiencies of merging three carrier service areas in the aggregate medium claims volume service area. The area was previously serviced by Blue Shield of Western New York, Genesee Valley Medical Care, Inc., and Metropolitan Life Insurance Company. The successful offeror for this contract was an incumbent carrier, Blue Shield of Western New York (BSWNY). The operational period of this contract is June 1979 to September 1982. The projected savings to be realized from this contract are $15,593,300. Liquidated damages have been assessed against this contract in the amount of $110,816.97 for performance deficiencies in the period January through June, 1980.

In FY 80, HCFA negotiated a Part A fixed-price incentive contract with the Blue Cross Association (BCA) and Blue Cross/Blue Shield (BC/BS) of Greater New York (Plan) to consolidate all the Blue Cross Plans in the State of New York. This procurement resulted from an unsolicited proposal submitted by Blue Cross Association and the Plan. Under the contractual arrangement, BCA is the intermediary and Blue Cross and Blue Shield of Greater New York serves as the subcontractor and handles the operational aspects of the arrangement. The outgoing Plans continue to be involved under purchase service agreements with BC/BS of Greater New York and provide audit and reimbursement as well as beneficiary and provider services in their localities. The contract, which became operational during FY 81, reduced the number of subcontractors (Blue Cross Plans) within the State from seven to one. The outgoing Blue Cross Plans terminated their operations on a staggered schedule and the central site in Syracuse assumed the entire operation May 1, 1981. The contract extends through April 30, 1984, and provides incentives for excellent performance as well as for the imposition of liquidated damages for less than satisfactory performance. The new subcontractor will process an estimated 12.8 million bills during the term of the contract. The total amount of the operational phase of the contract is $48,903,000.

The first fixed-price competitive bid contract under Part A was to have been awarded for the State of Missouri on July 2, 1979. The term of the contract was to have been January 1, 1980, through December 31, 1982. Court action was initiated against DHHS and on June 29, 1979, the U.S. District Court for the Western District of Missouri rendered a decision which enjoined DHHS from making an award in the procurement. Among other things, the parties initiating the suit contended that the planned experiment violated existing Medicare legislation, which permits participating providers of health care services to nominate their Part A fiscal intermediary. On August 27, 1979, DHHS filed an appeal with the U.S. Court of Appeals for the Eighth Circuit requesting a reversal of the lower court's decision. On June 9, 1980, favorable decisions for the Government were rendered by the Appeals Court in Missouri and subsequently by the District Court after additional litigation. Thereafter, on September 19, 1980, HCFA proceeded with the experiment by updating the Request for Procurement (RFP) and seeking "Best and Final" offers from those organizations which had responded to the original RFP. Following an evaluation of these "Best and Final" offers, HCFA announced on November 19, 1980, that a contract would be entered into with Blue Cross of St. Louis. The new contract period is from November 10, 1980, through November 30, 1984 and contains provisions for the assessment of liquidated damages in the event of poor performance. The total cost of the contract is $13,791,100, with a projected savings of $2 million.

For an experiment to test the potential efficiencies of merging several contractor operations in a multi-State environment and the feasibility of a common claims process for the Medicare Parts A and B programs, an RFP in the Colorado, Utah, and Wyoming service area was released on August 2, 1979. A preproposal conference on the RFP was held on September 12, 1979. On September 14, 1979, the Blue Cross Association, along with Blue Cross/Blue Shield of Colorado, Blue Cross/Blue Shield of Wyoming and Blue Shield of Utah, filed a suit with the U.S. District Court for the Western District of Wyoming requesting that the DHHS be enjoined from conducting this experiment. The issues in the litigation are similar to those in the Missouri litigation. On

November 1, 1979, the Court enjoined DHHS from awarding a contract under this proposed experiment. On December 31, 1979, DHHS filed an appeal with the U.S. Court of Appeals for the 10th Circuit. The final brief was submitted by DHHS on August 22, 1980. (In a decision rendered November 19, 1981, DHHS (HCFA) won on all points.)

As a result of experience with the experimental contracts in FY 80, a legislative proposal was under consideration which would allow HCFA to enter into contracts on other than a cost basis "across the board."

As part of HCFA's plan to improve service to beneficiaries and providers, and to reduce the number of contractors in the Medicare program, three contract initiatives were undertaken. The first involved consolidation of the Part A workload in the State of Tennessee. This consolidation made the Chattanooga Blue Cross Plan the sole Part A subcontractor for the State, beginning April 1, 1981. However, part of the arrangement provides for the Memphis Blue Cross Plan to continue performing some Part A functions under subcontract with Chattanooga Blue Cross.

In a similar arrangement, Pennsylvania Blue Shield became the Part B carrier for the State of Delaware, replacing Delaware Blue Shield. Delaware Blue Shield continues to perform some carrier functions under subcontract with Pennsylvania Blue Shield.

Pennsylvania Blue Shield also was awarded full responsibility for Part B carrier functions in the Washington, D.C., metropolitan area, effective October 1, 1981. Previously, Medical Services of D.C. was the carrier for this area.

Other FY 81 Ongoing Performance Improvement Initiatives:

1. Intermediary Systems Testing Project

The Intermediary Systems Testing Project (ISTP) is designed to check the quality of the intermediaries' claims processing operations. ISTP consists of a test file of approximately 114 claims which are used to determine an intermediary's ability to make correct entitlement, eligibility, and utilization determinations. Testing is repeated if major computer changes are made or if an intermediary fails to achieve a test score of 70. In FY 81, 32 intermediaries were tested.

Major common errors were:

1. Non-detection of duplicate outpatient billings.
2. Claims showing a termination/date of death were not processed correctly.
3. Overlapping billing dates/linking benefit periods were not detected.

In FY 81, several intermediaries utilized the ISTP package to test their software system prior to going on-line.

2. Carrier Systems Testing Project

The Carrier System Testing Project (CSTP) is designed to check the quality of the carriers' claims processing operations. CSTP is designed to test all facets of a carrier's claim processing system, from clerical input of approximately 150 test claims to final disposition of the explanation of benefit notices (EOMBs). Testing is repeated if a carrier's claims processing fails to achieve a passing test score of 90. In FY 81, 31 carriers were tested.

Major problems encountered were:

1. Failure to state the correct deductible on the EOMB.

2. Improper use of query codes.

3. Excess queries.

A CSTP test must be processed and passed by every new contractor prior to entry in the Medicare program. In FY 81, several carriers utilized the CSTP to test changes to their software systems prior to implementation.

3. Paperwork Reduction

A growing number of providers of health care services keep records by computer. During FY 81, HCFA continued initiatives to take advantage of this technology by encouraging providers to submit claims to carriers and intermediaries in machine readable form. This reduces errors, saves the contractors the cost of converting data from hardcopy to computer files, and reduces claims processing time. One initiative that HCFA undertook was development of standard specifications for use in submitting claim data to intermediaries in machine readable form. Intermediaries were instructed to have the systems capability to accept the file and record formats on these specifications by December 1, 1980. Instructions will require intermediaries, at the provider's option, to electronically transmit remittance data related to claims that are submitted electronically. HCFA also considered issuance of a regulation which would require providers to bill electronically if they have the capability to do so.

4. Provider Uniform Billing

The American Hospital Association, with support from HCFA and other concerned components of the health insurance industry, has been working since 1968 to develop a uniform institutional provider billing form for use by all third party payors. Following inconclusive testing of forms in the mid-seventies, a revised form (the UB-16) was developed. This form is for both inpatient and outpatient services. Tests of the UB-16 were conducted in Arizona, Connecticut, Florida, Nevada and Ohio. A contractor (SysteMetrics) was engaged to prepare a formal evaluation of the uniform bill experience. The final report was submitted to HCFA in 1980. Based on that report and the comments of concerned parties repre-

senting hospital and government and non-government payors, revisions were made to the form and the new revision was designated UB-82. The revised form and data element definitions were circulated for review and comments throughout the hospital and insurance industries, including Medicare intermediaries and Medicaid fiscal agents.

5. Carrier Alphabetic State List (CAST)

The CAST is an alphabetic listing of all Medicare beneficiaries residing in a geographic locale. It includes basic identification data for each beneficiary: Medicare claim number, complete name and address, sex, and date of birth. A CAST listing is created for each State, the District of Columbia, Puerto Rico, Guam, Virgin Islands and American Samoa. Updated listings are produced and distributed every six months (spring and fall) to HCFA regional offices, carriers, intermediaries, State buy-in agencies, and the Railroad Retirement Board regional offices.

The purpose of CAST is to assist Medicare claims processing contractors and the Medicare regional offices in resolving beneficiary identification problems encountered when processing Medicare bills and claims and in maintaining State buy-in rolls. It substantially reduces the referral of large numbers of such problems to the SSA district offices.

During FY 81, CAST was converted from microfilm to microfiche listings and a commercial micrographic service bureau contract was obtained to produce the microfiche listings. This resulted in a significant reduction of the CAST annual production cost and in more timely CAST data being provided to carriers and intermediaries.

6. Beneficiary Toll Free Telephone Service

During FY 81, the Part B carriers received over three million beneficiary inquiries on toll free lines at an approximate cost of $2.15 per call or $.04 per claim processed. Total administrative cost to the program was $6.4 million. Toll free service is generally perceived by the public as a valuable and tangible indication of the contractors' responsiveness to beneficiary concerns. It also encourages the public to call the contractor about Medicare questions rather than the Social Security district offices. However, budget reductions for administrative costs for the last quarter of FY 81 caused some diminution in the availability of this service and an increase in the likelihood of busy signals.

C. REIMBURSEMENT CONTROLS/POLICY INITIATIVES

The Medicare program presently has two components established by Title XVIII of the Social Security Act. Hospital Insurance (Part A) provides for payment of inpatient services furnished by hospitals and other institutional providers of services on a "reasonable cost" basis. Supplementary Medical Insurance (Part B) provides for reasonable cost reimbursement of outpatient institutional services and payment for services furnished by physicians and other suppliers on a "reasonable charge" basis.

To implement these reimbursement principles, it is essential that the Medicare program establish tests of "reasonableness" to ensure the continued delivery of high quality health services to beneficiaries and assure that unwarranted costs and charges are not paid. In FY 81, several reimbursement policy initiatives were undertaken to continue to meet these objectives.

Reasonable Cost Reimbursement Initiatives

Background - Under the original Act, provider reimbursement of reasonable costs included all necessary and proper expenses incurred in the delivery of patient care. It was soon recognized, however, that reimbursement on the basis of incurred costs did not offer sufficient incentives to control the rapid escalation of health care expenditures. The enactment of P.L. 92-603, the Social Security Amendments of 1972, greatly enhanced HCFA's ability to control Medicare costs.

Section 223 of P.L. 92-603 amended the definition of reasonable cost in Section 1861(v)(1) of the Social Security Act to exclude costs determined to be unnecessary in the efficient delivery of needed health services. Congress reasoned that health care institutions, like other enterprises, should face the financial consequences of inefficiency. The Amendments authorized the establishment of prospective limits so that providers could act to control their costs. It was felt that the establishment of prospective limits would reduce provider financial uncertainty by defining limits prior to the onset of the cost reporting period to which they applied.

Regulations implementing Section 223 authorized the establishment of prospective cost limits based on provider classification according to such factors as similarity in size, location, and economic characteristics. The regulations also established the conditions under which providers may be entitled to a change in classification, an exemption from, or an exception to the limits. The statute and regulations also provided for relief by allowing a provider, under certain circumstances, to charge excess costs to the beneficiary.

In granting the authority to establish prospective ceilings on costs, Congress was aware of the difficulties that could arise due to deficiencies in cost data, or because of limitations in measuring health care output and defining efficient delivery of care. Congress in the past recognized that the initial limits would, of necessity, be imprecise and affect a relatively small number of providers. The expectation, however, was that cost limits would be established to the extent currently feasible with continuing refinement as appropriate methodology developed. Consistent with this expectation, in FY 80 HCFA modified the 223 limit setting methodology for hospitals and home health agencies and extended its application to skilled nursing facilities.

Although the methods for establishing the 223 limits vary by provider type, they had several common features. The limits were derived from reported costs of comparable facilities. Cost data were obtained from Medicare fiscal intermediaries. Comparability was achieved by provider classification according to predetermined criteria. The criteria was uniformly applied so that the basis for classification is identical for each facility. The result was a classification system which produced reasonably homogeneous groups so that costs from similar providers could be compared. For each group, costs beyond a certain statistical threshold were presumed (in the absence of evidence to the contrary) to be greater than the costs necessary to deliver health services efficiently. The cost limits, therefore, restricted the recognition of "reasonable cost" to a standard cost representative of that experienced by similar providers. HCFA directed most of the FY 80 changes in the limit setting methodology toward improving the homogeneity of the classification groups to enhance the equity of the limits as a presumptive measure of efficiency.

On August 13, 1981 the Congress passed the Omnibus Budget Reconciliation Act of 1981 (P.L. 97-35) which, for the first time, defined in the statute the level at which the cost limits would be set. These levels were 108 percent of the classification group mean for hospitals and at the 75th percentile of the home health agency classification groups. The reduced levels of limits were to become effective for services provided on or after October 1, 1981. Notices implementing these changes were published in the Federal Register on September 30, 1981.

Section 2142 of P.L. 97-35, as defined in the statute, directed the Secretary to establish limitations on the reasonable cost of and reasonable charge for outpatient services. The limitations were established to the extent feasible and were reasonably related to charges for similar services in physicians' offices in the same area. HCFA initiated the development of methodology for setting these limits.

1. Reasonable Cost Limits - Hospitals - Pending the development of a classification system sophisticated enough to quantify such difficult to measure variables as case-mix and scope of service, HCFA placed limits on hospital general routine service costs. Routine costs are basically the costs of room, board, and general nursing services and exclude any costs associated with ancillary services and special care units, such as intensive or coronary care. HCFA published schedules of limits on hospital inpatient routine service costs annually since 1974.

   In developing the initial schedule of limits, HCFA classified hospitals using only two variables - bed size and economic environment. The latter was reflected by geographic location (urban or rural) and area per capita income level. Because this method was relatively unsophisticated, the limits were established at a high level (the 90th percentile plus ten percent of the median per diem cost) permitting a wide margin for any variables not recognized by the system. Previous refinements have been incorporated in the limit setting methodology, permitting a lowering of the level of the limits. However, the basic system of hospital classification remained essentially unchanged until 1979.

   The methodology was substantially revised for the hospital limits effective July 1, 1979. Costs not reflective of relative efficiency

of operation, such as capital, malpractice insurance, and medical education expenses, were excluded in deriving and applying the limits. All urban hospitals were then classified into four bed size groups without any distinction for economic environment. Rural hospitals were categorized into three bed size groups in the same way. The portion of cost attributable to wages was adjusted for differences in area wage levels by an index developed from hospital wages paid within the locale. Hospital costs were previously adjusted for inflation using a "market basket" of goods and services hospitals typically purchased in furnishing routine care. Prior to adoption of this technique, inflation adjustments were based on actuarial estimates of cost increases. Additionally, HCFA included an adjustment to increase the limits for hospitals located in States furnishing less than the national average days of care per 1,000 Medicare beneficiaries.

For the limits effective July 1, 1980, HCFA retained the basic features of the FY 1979 limits. However, a further adjustment was provided to account for additional costs which result from teaching programs but not specifically identified as teaching costs. Also, the proportion of costs subject to adjustment by the wage index was increased to approximate the actual economic environment. Because these improvements enhanced cost homogeneity, the level of the limits was set at 112 percent of the group mean. A mean based threshold avoided the objection to the percentile based limits under which a certain percentage of hospitals in each group was judged inefficient even where actual cost variations were minor.

The limits effective July 1, 1981, retained the same methodology used in FY 1980.

2. Reasonable Cost Limits - Skilled Nursing Facilities - Proposed limits on skilled nursing facility (SNF) costs were published in 1979 and a final schedule became effective October 1, 1979. The final schedule also established limits for Medicaid skilled nursing facilities and intermediate care facilities (ICFs). The Medicaid State agencies, however, differ widely in their methods of determining allowable costs. Because of the technical problems these agencies encountered in the application of the published limits, the regulations were subsequently amended, suspending the application of the cost limits to Medicaid payments for SNF and ICF services.

The SNF routine cost limits are very similar in design to those for hospital routine operating costs. The limits are derived from reported inpatient routine service costs of comparable facilities. Comparability is achieved by classifying SNFs according to location (urban or rural) and status as either a free-standing or hospital-based agency.

The SNF limits resemble the 223 hospital limits in other respects as well. Capital related costs are excluded in deriving and applying the limits. The remaining costs are adjusted for inflation using a market basket index based on cost of goods and services which SNFs typically purchase. Differences in routine service costs resulting from

differences in prevailing area wage levels are recognized using the same wage index incorporated in the hospital limits. Hospital wage data are used because of the lack of quality wage data suitable for indexing specific to nursing facilities and the similarity of the hospital and SNF labor markets. The level of the limits is also established using a mean based criterion which, effective October 1, 1979, was 115 percent of average group costs. A revised set of limits incorporating several refinements in the initial schedule and setting the level at 112 percent of group mean cost was published in the Federal Register on September 4, 1980 and became effective October 1, 1980.

The limits effective October 1, 1981 retain the same methodology used in 1980.

3. Reasonable Cost Limits - Home Health Agencies - Section 223 limits on home health agency (HHA) costs were first established effective July 1, 1979. These initial limits were based on a classification system which only distinguished between urban and rural providers and were set at the 80th percentile of per visit costs. The limits were derived from the per visit costs of agencies for each of six Medicare covered services: skilled nursing care, physical therapy, speech pathology, occupational therapy, medical social services, and services of home health aides. Cost data were obtained from the Medicare fiscal intermediaries. Inflation adjustments were based on actuarial estimates of increases in interim payments for home health services and a formula for voluntary price restraint in the health care sector established by the Council on Wage and Price Stability.

Although HCFA calculated limits for each type of home health service, the various cost finding methods used by providers made it impractical to apply the limits directly to the per visit costs of individual services. Therefore, HHA cost limits were applied on an aggregate basis. That is, the limits for each type of service were multiplied by the number of visits for that service. The sum of the resulting amounts was then compared to the agency's aggregate allowable Medicare cost. However, mandatory uniform cost finding for HHAs effective October 1, 1980 will eventually permit the direct application of limits for each type of service.

For the HHA limits effective July 1, 1980, HCFA adopted several features common to the hospital and skilled nursing facility methodologies. The revised system is based on an urban/rural classification system with separate categories for hospital-based and freestanding agencies. The new methodology also incorporates the hospital wage index to recognize differences in area wage levels (an HHA specific index is presently not available) and relies on an HHA market basket for inflation adjustments. Unlike the hospital and SNF methodology, HHA per visit costs in each group were arrayed in descending order, and the limit was established at the 80th percentile for each type of service in each group.

Other Reimbursement Initiatives

1. Inpatient Routine Nursing Salary Cost Differential--Under Medicare Part A, hospitals and skilled nursing facilities (SNFs) are reimbursed based on the reasonable cost of health care items and services furnished to beneficiaries. The Medicare rules for calculating reimbursable costs of the providers include an inpatient nursing salary cost differential at a rate of eight and one-half percent. The differential is not an add-on to the total routine nursing salary costs incurred by a provider but rather a reallocation of the actual routine nursing salary costs between aged, pediatric, and maternity patients and all other classes of patients.

   Therefore, the formula for determining the inpatient routine nursing salary cost differential recognizes two inpatient general per diem costs:

   1. a higher than average cost applicable to aged, pediatric, and maternity patients; and

   2. a lower than average cost applicable to all other inpatients.

   Because it is a reallocation process, reimbursement of the differential to each provider is affected by the provider's total patient mix. For example, in a situation where 100 percent of a provider's patients are aged, pediatric, or maternity patients, there would be no reallocation and, as such, no differential payment by Medicare.

   The 1981 Budget Reconciliation Act (Section 2141) reduced the inpatient routine nursing salary cost differential as a reimbursable cost of hospitals, to a " . . . rate not to exceed 5 percent. . ." effective October 1, 1981.

2. Reimbursement for Swing-Bed Services--In response to the shortage of nursing home beds in rural areas for Medicare and Medicaid beneficiaries, the Congress enacted Section 904 of P.L. 96-499. This provision, which added Section 1883 to the Social Security Act, permits small rural hospitals to use their beds interchangeably as either hospital, skilled nursing facility (SNF), or intermediate care facility (ICF) beds. In order to qualify, the hospital must be granted a certificate of need for the provision of SNF and ICF services from the State health planning and development agency and must have an agreement with the Department. Reimbursement is based on the specific type of care provided. The reasonable cost of the routine SNF services furnished to Medicare beneficiaries is based on Medicaid per diem SNF payments in the prior calendar year. Medicare reimbursement for routine hospital services is determined after the amount attributable to the SNF and ICF services provided under the swing-bed arrangement is subtracted from total general routine service costs. During FY 81, HCFA worked on developing the regulations to implement this new provision.

3. Salary-Related Reimbursement of Certain Therapy Services - During FY 81, HCFA continued work to implement salary equivalency guidelines for physical therapy and respiratory therapy services furnished under arrangements between providers and independent contractors. These guidelines were developed under authority contained in Section 1861(v)(5) of the Social Security Act. Section 1861(v)(5) requires HCFA to develop criteria for determining the reasonable cost of services furnished by therapists or other health care specialists (except physicians) under arrangements with a provider.

Under the law, Medicare reimbursement for these services may not exceed an amount equal to the prevailing salary and fringe benefits that would have been payable by a provider had the services been performed by a provider employee, plus an allowance for other expenses related to furnishing these services. The definition of prevailing salary is based on the 75th percentile of the range of salaries paid to full-time therapists, using data compiled by the Bureau of Labor Statistics. The Medicare guidelines establishing these limits also contain a fringe benefit and expense factors. Additional allowances are made for travel, overtime, equipment and supplies, aides and assistants furnished by the contractor, and administrative or supervisory responsibility.

During FY 81, HCFA issued updated guidelines for physical therapy and respiratory therapy. In addition, HCFA published in the Federal Register on August 13, 1981, proposed changes in the methodology used to establish the guidelines. Final criteria and guidelines were prepared following review and analysis of comments received in response to the notice.

4. Bonding and Escrow Requirements for Home Health Agencies--Section 930(n) of P.L. 96-499 gives the Secretary authority to establish requirements (including bonding and the establishment of escrow accounts) for home health agencies (HHAs) as appropriate for the financial security of the program. Section 930(p) provides that costs an HHA incurs in complying with these requirements are not reimbursable under Medicare. Moreover, an HHA subject to these requirements cannot be reimbursed for interest costs incurred in borrowing to repay an overpayment unless the HHA has been determined to have acted in good faith.

The legislative history of the provision reveals that Congress was concerned that HHAs are often unable to repay overpayment without borrowing the funds to do so. HHAs for the most part are not well-capitalized, and many are dependent on Medicare to a significant degree

(about 40 percent of all HHAs have Medicare utilization of at least 75 percent). When an HHA incurs a significant overpayment, it may borrow to repay the overpaid amount, or pay the amount back in installments, thereby jeopardizing its cash flow. If the overpayment is too large, the HHA may become insolvent. When an HHA borrows to repay an overpayment, it includes the interest expense in its costs, and Medicare reimburses the HHA a portion of those costs.

A notice of proposed rule making was being prepared to establish financial security requirements consistent with Congress' concerns while minimizing the adverse financial consequences such requirements would have. The proposed regulation will describe categories of HHAs that potentially represent a financial risk to the program and will establish financial security requirements that are consistent with the degree of risk involved. Moreover, a variety of mechanisms will be offered, not limited to bonds and escrow accounts in the literal sense, by which HHAs may satisfy the requirements.

5. Reasonable Compensation Guidelines - The reasonable compensation for services of key administrative personnel (including owners who render provider services) is recognized as an allowable Medicare cost. However, the amounts of compensation are subject to evaluation under the general requirement of the Medicare law that provider costs must be "reasonable." The evaluation of owner compensation between 1968 and the present has been based on compensation ranges resulting from regional surveys of compensation for administrative positions occupied by a nonowner. Because compensation ranges developed on a regional basis are not standardized, it was decided it would be more effective to provide a statistically valid, standardized, nationwide approach to establish ranges which can be used by intermediaries in evaluating not only owner, but other key administrative personnel compensation.

   During fiscal year 1981, a national survey of key administrative positions was undertaken to obtain statistically valid compensation data for each type and class of Medicare provider. The data collected will be used to develop reasonable compensation ranges to be used as guidelines, along with other criteria, such as specialized experience or education, by Medicare intermediaries in evaluating the allowability of compensation costs under Medicare regulations 42 CFR 405.426 and 405.451(c)(2).

6. Revision of the Medicare Home Health Agency Cost Report--In October 1980, HCFA published and distributed revised cost reporting forms to be used by all home health agencies that are not provider-based. The revised cost reporting forms, required for cost reporting periods beginning on

or after October 1, 1980, implement final regulations published in August 1980. They provide a single method of allocating overhead costs and a single method of apportioning patient care costs between Medicare and non-Medicare patients. The revised forms will assist in the application of cost limits to home health agencies by requiring uniform and improved methods of determining the cost by type of service.

Previously, home health agencies used a variety of cost reporting methods, making comparison of costs among home health agencies difficult. The revised cost reporting forms will allow HCFA to analyze the relationship of direct and indirect costs of furnishing patient care and to compare costs among home health agencies, and will enhance HCFA's ability to develop and apply limits to home health agency costs.

Reasonable Charge Reimbursement Initiatives

It is common practice for physicians to bill their patients for laboratory tests which have not been performed in their own offices or under their personal supervision but which are acquired for their patients from independent laboratories. In these instances, the physician forwards the specimen to the outside laboratory which, in turn, bills the physician directly for the services performed. As a rule, independent laboratories use lower price schedules when they bill physicians for tests than they charge to the general public for similar services. These lower prices to physicians often reflect volume discounts and lower laboratory billing costs resulting from periodic billings.

In recent years, evidence accumulated by the General Accounting Office (GAO), the Congress and the Department has indicated that there are frequently substantial markups on bills submitted by physicians for these services. To help deal with this problem, the Congress enacted Section 918 of P.L. 96-499, the Omnibus Reconciliation Act of 1980, which precludes Medicare reimbursement of such markups.

The initial instructions to implement the new statutory provision were issued to the Medicare carriers in March 1981. A final regulation implementing the provision was published in the Federal Register on August 24, 1981. The new rule provides that: (1) If a bill submitted by a physician indicates that a particular laboratory service was performed by (a) that physician, (b) another physician sharing the practice, or (c) an individual under the physician's supervision, the reimbursement allowed will be based on the reasonable charge for that service. (2) If a physician bills for a laboratory procedure that was performed by an independent clinical laboratory and identifies the laboratory and the amount charged for that service, payment will be based on the lower of (a) the laboratory's reasonable charge for the service or (b) the amount the laboratory actually charged the physician. In either case, the physician is also allowed a nominal amount for collection and handling of the specimen if he or she bills for such services. (3) If the physician does not indicate that he or she performed the test, and does not identify both the laboratory and the amount charged for the test, payment is to be based on the lowest amount which the Medicare carrier estimates the test could have been obtained from a laboratory serving the physician's locality. A nominal specimen collection and handling fee will be paid to the physician only if the physician's bill indicates that the test was performed by an independent laboratory and not by the physician or personnel under his or her supervision.

Another significant change in reasonable charge reimbursement was also made when Section 946 of P.L. 96-499 was implemented. Before enactment of that provision, the Medicare carriers determined reasonable charges for covered services on the basis of the customary and prevailing charge screens in effect at the time the claims for reimbursement were submitted. Instructions were issued to the Medicare carriers in March 1981 to provide, in accordance with Section 946, that reasonable charges must be determined on the basis of the charge screens in effect at the time the services are furnished. The only exception to this rule is that the carriers will not go back further than one year to determine reasonable charges for claims filed after long delays. The final regulation implementing this provision was published in the Federal Register on December 31, 1981.

Other Policy Initiatives/Issues

1. Ambulance Services - A Notice of Proposed Rule Making was published in the Federal Register on August 27, 1980 that would expand the ambulance service benefit. Coverage would be extended to include round-trip transportation of hospital inpatients to other facilities, including such non-hospital facilities as clinics or therapy centers, to obtain medically necessary diagnostic or therapeutic services not available in the facility in which they are patients. Existing regulations limited ambulance service coverage, under certain circumstances, only to ambulance transportation to another hospital, to a skilled nursing facility, or to the patient's home. The regulation was proposed to recognize developments in medical care practice and health care planning which have made it necessary to provide round-trip transportation for hospital inpatients to other facilities to obtain services. It provides for (1) round trip transportation of a hospital inpatient to the nearest appropriate treatment facility to obtain medically necessary diagnostic or therapeutic services not available in the hospital in which the beneficiary is a patient and (2) round trip ambulance transportation of skilled nursing facility patients, and patients living at home, to obtain medically necessary diagnostic or therapeutic radiological services. The regulation also specifies that, in the case of a beneficiary who is being transported to a hospital to become an inpatient, the availability of a physician or physician specialist capable of providing the necessary treatment required by the beneficiary's condition is a factor in determining whether the hospital has appropriate facilities to care for the beneficiary. A final regulation was prepared following review and analysis of comments received in response to the notice.

2. Oxygen Therapy in the Home - A notice published in the Federal Register on December 14, 1979, contained proposed policies and guidelines that Medicare Part B contractors would apply, where necessary, to claims for oxygen used in the home. The objective was to assure that uniform criteria are applied by contractors in determining whether a valid medical need for oxygen exists so that the home use of oxygen can be paid for by the program. The guidelines proposed medical conditions for which oxygen therapy is appropriate when used by the home patient and also proposed what would be acceptable medical evidence of the need for

oxygen. This evidence would include a physician's prescription with specified information and blood gas study reports. The notice also contained a list of questions about different medical aspects of the proposed guidelines in order to obtain as complete a report as possible from the medical community. Criteria and guidelines in this area are being reviewed within the Department.

3. Exclusion of Heart Transplantation Procedures from Medicare Coverage - HCFA discontinued Medicare coverage of heart transplantation procedures effective June 13, 1980. That policy, announced in a HCFA Ruling published in the Federal Register on August 6, 1980, rescinded an earlier interim decision of November 2, 1979 that had authorized coverage for heart transplantation procedures only at Stanford University Medical Center. The Ruling authorized payment for heart transplantation and associated medical treatment at Stanford University Medical Center and at the University of Arizona Medical Center performed on or before June 12, 1980, or for candidates accepted on or before June 12, 1980. It excluded other heart transplantation coverage pending the results of further study.

The Ruling further announced that HCFA, in close cooperation with the Public Health Service, National Center for Health Care Technology, would conduct a broad study of all aspects of Medicare coverage of heart transplants, including social, economic, and scientific issues. The study will also examine the impact of a coverage decision on beneficiaries, the Medicare program, and competing health care providers, and will include patient care costs for a limited number of Medicare beneficiaries accepted for transplantation at appropriate institutions.

The study will consist of two parts. Institutions that agree to participate in Part I will make available data concerning heart transplants performed during the study period, as well as during the most recent five year period. In Part II, a qualified research organization will be selected to develop, evaluate and analyze a wide range of data furnished by institutions participating in the study and from other sources, and will forecast possible scientific, medical, economic and social issues that could affect reimbursement and influence Medicare coverage policy.

When the study results have been analyzed, HCFA intends to publish a proposed decision on Medicare coverage of heart transplants and to solicit full public participation in development of the final policy, with all pertinent information made available for analysis.

4. Coverage Decision Procedures - During FY 1981, HCFA has continued to improve its process for developing national Medicare coverage decisions concerning whether or not health care items and services are medically "reasonable and necessary." The Medicare law prohibits payment for items or services which are not reasonable and necessary for diagnosis or treatment.

A Physician Panel, comprised of all HCFA physicians and dentists, as well as two physicians representing the Public Health Service (PHS), met regularly to discuss and recommend action on new coverage issues before HCFA.

Written procedures have been established for referral of new coverage issues to the PHS after presentation to and recommendation by the Physician Panel. Procedures have also been established for issuance of HCFA coverage instructions based on advice and recommendations from the PHS.

During FY 81, HCFA referred 28 new coverage issues to the PHS, and published 53 instructions based on advice received from the PHS. An additional number of coverage issues was disposed of without the need for published instructions.

5. Prohibition Against Payment for Less than Effective Drugs - On June 5, 1980, HCFA published in the Federal Register a proposed rule to prohibit the payment for certain drugs under the Medicare and Medicaid programs. The rule would bar the expenditure of Federal funds under the two programs for drugs determined by the FDA to be not effective for any indicated use, and drugs that have not been approved for sale in interstate commerce. A number of comments were received in response to the proposed rule but before a final regulation could be prepared based on comment analysis, this policy initiative was superseded by enactment of Section 2103 of the Omnibus Budget Reconciliation Act of 1981 (P.L. 97-35). Effective October 1, 1981, this provision prohibited Medicare Part B payment and Medicaid payment for prescribed drugs for which the Secretary has issued a Notice of an Opportunity for a Hearing (NOOH) on a proposed order of market withdrawal because the FDA determined the drug less than effective for all indicated uses. A final regulation implementing this new provision was published in the Federal Register. Procedural instructions were issued to Medicare carriers and Medicaid State agencies, containing a list of drug products and known related products lacking substantial evidence of effectiveness and subject to an NOOH.

6. Provider Reimbursement Appeals - Under the Medicare program, the amount paid to a provider of services is the reasonable cost of items and services furnished to beneficiaries. To be reimbursed for covered services, providers must file cost reports with their fiscal intermediaries to determine the amount of reimbursement. If a provider is dissatisfied with the amount of reimbursement (or if the intermediary does not make its determination timely), the provider has the right to request a hearing before one or more hearing officers designated by the intermediary, or before the Provider Reimbursement Review Board (PRRB), if the amount in controversy is $10,000 or more. The statute authorizes the Secretary to reverse, affirm, or modify a decision of the PRRB. This authority has been delegated to the Administrator of HCFA, the official having administrative responsibility for the Medicare program. If a provider is dissatisfied with the Administrator's decision, or the PRRB's decision, if it is not reviewed by the Administrator, the provider may request review of the final agency decision by a United States district court.

On February 14, 1980, HCFA published in the Federal Register (45 FR 9953), a number of proposed regulatory additions and revisions designed to improve the review process. All relevant public comments have been taken into account and a revised regulation is under review.

Section 955 of P.L. 96-499, the Omnibus Reconciliation Act of 1980, amended Section 1878(f)(1) of the Social Security Act. The amendments make it possible for a provider that requests and has the right to obtain a hearing by the PRRB under Section 1878(a) of the Act to bypass the hearing and obtain judicial review of any action of the fiscal intermediary involving a question of law or regulations relevant to the matters in controversy, whenever the PRRB determines that it is without authority to decide the question. The PRRB may determine that it does not have the authority to decide a question, either on its own motion or upon the request of a provider.

In FY 1981, HCFA has prepared a regulation document detailing the procedures by which a provider may bypass the PRRB hearing.

7. Waiver of Liability Procedures Applicable to Erroneous Placement in an Inappropriately Certified Bed of a Participating Hospital or SNF--Section 956 of the Omnibus Reconciliation Act of 1980 (P.L. 96-499) was enacted December 5, 1980, and became effective January 1, 1981. It amended Section 1879 of the Social Security Act by adding new paragraph (e), which has the effect of permitting program payment when a beneficiary, who otherwise qualifies for Medicare coverage, is precluded from program payment solely because the beneficiary received the services in a part of an institution not qualified to provide the appropriate level of care for purposes of Medicare. The provision applies to hospital and SNF levels of care, and incorporates into law requirements almost identical to those stemming from the earlier Wright v. Califano court ruling on SNF claims involving erroneous placement in noncertified beds which had taken effect on September 11, 1979. Payment under the amended Section 1879 is limited to cases in which the appropriate placement was the result of unintentional, inadvertent, or erroneous action by a provider of services acting

in good faith based on the advice of a utilization review committee, physician, Professional Standards Review Organization or fiscal intermediary, or was the result of a clearly erroneous administrative decision by a provider of services.

HCFA issued interim administrative instructions in March 1981, implementing this provision of the law. A Notice of Public Rule Making (NPRM) was proposed.NPRM.

D. IMPROVING UTILIZATION SAFEGUARDS

One of the most critical areas of Medicare program activity is to establish safeguards against improper and excessive utilization of health care services. A part of the rapidly increasing costs of Medicare continues to be attributable to the furnishing of medical services for which Medicare claims submittals are made, which are not medically necessary by reference to generally accepted medical practice norms, or which are medically inappropriate, particularly in terms of location of care. Most overutilization does not represent any criminal intent to defraud the Medicare program. Usually they represent "decisions of opportunity," i.e., when a service opportunity is presented which is reimbursable by an external party and there is a lack of rigorous definition about the nature of the service or the reimbursement rules for that service, there is an incentive to render the service with a high degree of expectation that it will be reimbursed. The delivery of medical care is particularly subject to this incentive because the necessity and appropriateness of such services are often judgmental matters. Additionally, some medical practices which tend to induce overutilization have become traditional in the American health care delivery system.

Under the Part A hospital insurance program, one of the most obvious examples of this is unnecessary occupancy of expensive inpatient facilities, when health services at that level of care are not required. An admission to a hospital for services which could be given in a skilled nursing or intermediate care facility or on an outpatient basis, with equal medical effectiveness, is a particularly striking example of such a situation. A Friday admission to a hospital whose laboratory is closed on weekends, when the initial purpose of the admission is to secure diagnostic services, is another obvious situation in which costs are inappropriately generated. Extended stays in a facility beyond the patient's medical need for that facility's level of care creates a far higher care cost than should be incurred by either the patient or the insurer.

In the medical insurance program, excessive or unnecessary utilization often occurs because the common charge structure for medical services, whether in an outpatient hospital setting or in respect to services furnished by private physicians, is generally that a fee is charged for each visit. Under such a system, program reimbursement can be substantially increased solely as a result of an increased number of visits. That increase in number of visits may or may not represent a proportionate increase in either the quantity or quality of medical services rendered. Thus, patients may initiate physician or outpatient visits which their medical needs do not require, or may request additional visits after their current medical needs have been met. Additionally, physicians and outpatient clinics may invite or allow more patient visits than are required for the patient's medical management or which customary practice would ordinarily dictate.

The program approached its responsibilities in the area of utilization safeguards in a number of ways. The structure of the program itself provides some fundamental controls on general utilization. There are benefit limitations on the number of days of care in hospitals and extended care facilities and for home health visits. These limits are intended to assure coverage for the vast majority of medical situations that require these levels of service and yet provide upper limits beyond which program payment would not be made. The program prescribes deductible and coinsurance amounts which may serve as a safeguard against the initiation of unnecessary services because they require patients to share the cost of services and, thus, provide some motivation for them not to seek services unnecessarily or prolong services beyond their medical needs. Particularly significant are the program requirements that, for services to be reimbursable, they must be furnished on a physician's order or under the direction of a physician. Additionally, for inpatient services to be reimbursable, a physician or a Professional Standards Review Organization (PSRO) must certify that they are medically necessary. Finally, Section 1862(a)(1) of the Social Security Act provides that under both the hospital and medical insurance programs, payment may not be made for services which are not reasonable and necessary for the diagnosis and treatment of illness and injury.

During FY 1981, HCFA continued to refine the prepayment screens which carriers utilize to identify situations of potential overutilization or variations from medical necessity norms.

A particularly important screen, utilized by many Part B carriers, permits the prompt identification of individual physicians whose total bills for Medicare patients in given periods significantly exceed what would normally be expected in ordinary practice. Investigation of physicians identified by means of such a screen can disclose instances of overutilization or cases in which the physicians' practices are sufficiently questionable to warrant reporting to the State or local medical society or even cases of deliberate fraud in which prosecution would be appropriate. The increasing awareness that cases involving possible excessive rates of payment are being investigated constitutes a significant deterrent to overutilization.

Other types of screens which are being increasingly used by carriers provide for the identification of (1) physician-patient contacts which appear abnormally frequent for a particular diagnostic category or therapeutic procedure, (2) potential markup situations where physicians include an added charge for services actually provided by an independent laboratory, or (3) situations in which a physician begins charging separately for component services which had previously been rendered as a combination of package service with a single charge. Carriers are increasingly incorporating such screens into their electronic data processing systems.

It is important to recognize that in many instances variations from usual patterns are justified by the facts of an individual case. The important thing, however, is that the Medicare claims review process must be able to identify significant variations so that further review can be undertaken in instances of possible excessive or improper utilization.

HCFA is also continuing its efforts to assure that Medicare payment is only made for items and services which are medically necessary and of acceptable professional quality. This activity takes a variety of forms. First, HCFA continues to identify individual items, services, and procedures which are of questionable value. When HCFA obtains medical evidence that an item, service, or procedure is not safe and effective or that it is experimental, it discontinues payment for it. HCFA conducts these activities with the support of the Public Health Service and in collaboration with national medical and medical specialty societies.

Another dimension of the medical necessity issue relates to determinations as to whether items or services provided to a beneficiary in a specific case are medically necessary. In recent years, criteria have been developed to assist Medicare intermediaries make these determinations. This is a very sensitive area, of course, since such determinations may directly challenge the medical judgment of the physician who ordered or rendered the services. Because this is such a sensitive area, review criteria are developed by physicians, and denials are only made on the basis of a physician's professional judgment. The PSRO program, established in 1972, provides for organizations to develop and apply medical necessity criteria to services rendered in hospitals and nursing homes.

The inducements to the provision of services beyond medical need are considerable. These inducements range from pressure put on physicians by patients who are familiar with popularized diagnostic and therapeutic procedures and exotic new technologies, to the increasing concern by physicians over potential malpractice suits for failure to provide the entire gamut of diagnostic and therapeutic procedures to every patient. The latter leads to what has been called "defensive medicine." Other inducements are the use of

expensive new equipment beyond medical justification in order to amortize the high cost of such equipment and, for some, the inducement of simple avarice, under the rationalization that the additional service, even though unnecessary, does not harm the patient medically or financially, since he or she "has insurance."

In dealing with these problems, HCFA works closely with professional organizations to assure that services are provided and reviewed in accordance with the best professional judgment.

E. QUALITY AND APPROPRIATENESS OF CARE

A major goal of the Medicare program is to assure that its beneficiaries receive appropriate health care services. This is assured by requiring that those facilities caring for Medicare beneficiaries are structurally safe, clean, properly staffed, and provide needed services and that the actual care delivered to beneficiaries meets accepted professional standards. In addition to assuring the quality of services received, HCFA must make sure that services are necessary and performed at the most economical level consistent with good care. These efforts ensure a high quality of care for beneficiaries while simultaneously constraining health care costs.

Regulatory Reform

In the spring of 1981, HCFA organized a top level task force which embarked on a broad ranging program of regulatory reform. Its major focus was to systematically review all major regulations under HCFA's jurisdiction and to revise or delete any regulation found to be needlessly burdensome or not cost effective. This task force is also charged with simplifying regulations and reducing the regulatory burden on providers while maintaining the quality of care for beneficiaries.

This section describes HCFA's interrelated programs that fulfill the quality assurance function and the major FY 81 initiatives in each program. These programs are: Standards and Certification, the Professional Standards Review Organizations (PSROs) program, and the Second Surgical Opinion program.

Standards and Certification

In accordance with the Social Security Act, any facility providing health care services to Medicare beneficiaries must meet certain health and safety standards before it is eligible to receive reimbursement from Medicare. In order to ensure that these standards are met, HCFA provides for periodic survey of each facility. These surveys are conducted by each of the States under contract with the Department. In the case of hospitals, however, the law allows the privately-run Joint Commission on Accreditation of Hospitals (JCAH) and American Osteopathic Association's (AOA) standards and surveys to be considered as having met the Federal government's requirements. Therefore, States only survey those hospitals not accredited by JCAH or AOA and will, on a sample basis, conduct surveys on JCAH and AOA hospitals in order to validate that the surveys conducted by these associations continue to meet Medicare requirements.

Generally, the Federal Standards and Certification program is responsible for establishing and updating Federal health care standards, developing State survey procedures, and monitoring surveys and standards enforcement. During FY 81, program emphasis was placed on (1) upgrading standards affecting the quality of services, (2) developing more efficient and effective survey procedures, (3) reducing regulatory burdens and eliminating duplicative requirements to lessen unnecessary expenses imposed by certain standards. Discussion of major FY 81 activities follows.

1. Conditions of Participation

Conditions of participation establish the requirements for life safety, medical care, and physical and social environment that facilities must satisfy to participate in Medicare. During FY 81, two major conditions targeted for regulatory review were:

- Hospital Conditions of Participation - simplification of requirements which hospitals must meet to be certified to participate in Medicare and Medicaid.
- Skilled Nursing Facility/Intermediate Care Facility (SNF/ICF) Conditions of Participation - revisions of present regulations governing conditions of participation for SNF and ICF facilities under Medicaid and Medicare programs.

2. Survey and Certification Procedures (Subpart S)

Survey and certification procedures for Medicare and Medicaid were developed at the time these programs became law. The survey process is an effort to assess the quality of care delivered to patients. Since development of these procedures, some elements have been found to be either unnecessary, or duplicative. In order to address these concerns, this process is also undergoing major review.

The major issues to be addressed for revision were identified and public hearings to discuss them were held during the Spring of 1980. These issues include: (1) provisions mandated by 1980 and 1981 Omnibus Reconciliation Acts; (2) the elimination of non-productive requirements; (3) consolidation of Medicare and Medicaid certification rules; and (4) elimination of unnecessary differences between Medicare and Medicaid requirements.

3. Fire Safety Evaluation System (FSES)

In FY 79, the Department published a Proposed Notice on the adoption of the FSES for hospitals, with a request for comment on both this proposal and on whether to apply the system to nursing homes.

The FSES was developed, at DHHS's request, by the Department of Commerce's National Bureau of Standards (NBS). The purpose was to determine how various combinations of widely accepted fire safety features could provide facilities with various equivalent alternatives for complying with the Life Safety Code (LSC) of the National Fire Protection Association. The FSES is a new alternate method of evaluating a facility for compliance with the LSC. It offers two important advantages: (1) it allows the Department to eliminate a repetitive waiver system under the LSC and (2) it provides facilities flexibility in meeting LSC requirements.

The HCFA Final Notice allowing use of FSES for hospitals and nursing homes continued in effect in FY 1981.

4. Regulations to Establish Conditions of Coverage for Suppliers of Laboratory Services

Hospitals and independent laboratories participating in Medicare must be approved by the Health Care Financing Administration for compliance with health and safety standards. In the past, the Food and Drug Administration (FDA) also conducted inspections of blood banks and transfusion facilities engaged in the collection and processing of blood and blood components. Thus, with few exceptions, non-Federal hospitals and independent laboratories which are surveyed and certified under Medicare are also inspected by FDA.

In October 1979, HCFA and FDA signed a Memorandum of Understanding (MOU) to coordinate Federally required inspections of hospital blood banks and transfusion services, in order to minimize duplication of effort and to reduce the burden on affected facilities. The MOU and the implementing regulations which became effective September 1981, enabled FDA to withdraw from the inspection of those facilities it previously inspected and still assure the health and safety of their patients.

The regulations confirm HCFA's authority to survey blood banks and transfusion services under regulations that are the same as the current FDA regulations. Uniformity in the requirements for immunohematological testing, transfusion services and blood-banking for facilities participating in the Medicare program has been achieved by adopting, by cross-reference, the FDA's regulations. This change has resulted in a consolidation of the survey activities in over 4,000 facilities previously surveyed by both HCFA and FDA. These facilities consist of hospitals and independent laboratories approved for participation in the Medicare program whose transfusion services were also subject to FDA registration and are duplicative of the FDA regulations.

5. JCAH Validation Process

In accordance with the Social Security Act, hospitals accredited by the Joint Commission on Accreditation of Hospitals are deemed to meet most of the requirements for Medicare participation. The Secretary is

required to perform surveys to verify that the acceptance of JCAH accreditation is an effective means of assuring the absence of serious deficiencies in participating accredited hospitals. The Department must inform Congress on the administration of the validation process.

Hospitals are chosen for these surveys as a result of either random selection within a statistically determined sample of accredited hospitals, or due to substantial allegations of the existence of conditions adverse to the health and safety of patients. In order to differentiate between the two types of surveys, those done for the former reason are known as validation surveys, and those done for the latter reason are called complaint investigations. The Department contracts with the State agencies to perform the surveys.

A detailed report on the validation process is submitted to Congress annually.

Professional Standards Review Organizations (PSROs)

In 1972, Congress enacted legislation calling for the establishment of PSROs to ensure that the health care services provided to Medicare and Medicaid beneficiaries are: (1) of a quality that meets professionally recognized standards of care, (2) medically necessary, and (3) appropriately provided in the most economical setting. PSROs replace hospital and skilled nursing facility Utilization Review Committees. PSROs are comprised of practicing physicians who engage in various activities associated with the review of care in a given locality. The law provides that PSROs are responsible for the reviews of health care services delivered in hospitals and long-term care facilities.

As a result of the Omnibus Budget Reconciliation Act of 1981, PSROs are required to review only those health services provided to Medicare patients but are no longer required to perform Medicaid reviews, effective October 1, 1981. State Medicaid agencies now have two options: (1) contracting with PSROs for the continued performance of medical or utilization review functions and therefore be deemed to meet the Utilization Control (UC) requirements for those services and providers that the PSRO reviews, or, (2) States may assume direct responsibility for assuring the UC required by Title XIX of the Social Security Act. Any agreements entered into with a PSRO prior to October 1, 1981 will continue to exist until the next renewal date of the agreement or in accordance with instructions in the existing grant.

Second Surgical Opinion Program

In FY 78, HCFA began a major information campaign to encourage consumers to seek a second opinion before undergoing non-emergency surgery. The campaign was particularly directed to Medicare and Medicaid beneficiaries. The campaign is premised on the patient's right to know the benefits and risks of the recommended surgery and any alternatives to that surgery. HCFA's second surgical opinion program centers around two major efforts:

- a national second opinion referral system
- a public information campaign

In FYs 80 and 81, nearly seven million brochures entitled "Thinking of Having Surgery? Think About Getting a Second Opinion" were distributed to welfare offices, SSA district offices, consumer and professional groups, and individuals throughout the United States. Public service announcements promoting the second opinion program and publicizing the national toll-free number (800-638-6833) were distributed to 730 television stations and over 6,000 radio stations.

Patients wishing second opinions can contact local referral centers or call the national toll-free number to obtain the name and telephone number of their local referral center. Approximately 28,000 calls have been made to the national "hotline" since the inception of the program in October 1979.

F. INCREASING HMO ENROLLMENT BY MEDICARE BENEFICIARIES

Health Maintenance Organizations (HMOs) are a growing alternative to traditional forms of health care delivery. An HMO is an organization which provides its members comprehensive health services, without regard to frequency or extent of services, in return for a predetermined, fixed premium paid by members. Thus, HMOs differ from traditional methods of health care delivery and financing. Under the traditional method, an individual buys health insurance from one organization but has services provided by other individuals and institutions, each of whom bills separately. An HMO, by contrast, is both a health care insurer and a health care provider, with members receiving covered services through the HMO. Because the amount which its members pay for the cost of care is fixed in advance, there is great incentive for HMOs to reduce the cost of care. They strive to reduce costs by emphasizing preventive care and health education, by providing only medically necessary care, and by using ambulatory care rather than more expensive hospital and other institutional care whenever possible.

In the early years of the Medicare program, HMOs and other prepayment plans could be directly reimbursed by Medicare on a capitation basis for only certain Medicare Part B services. But Congress recognized that the HMO's emphasis on keeping down health care costs could produce significant savings for Medicare. Therefore, in 1972, Congress authorized the Medicare program to enter into contracts with HMOs allowing them to be reimbursed on a capitation basis for all covered services under Parts A and B of Medicare furnished to beneficiaries who enrolled in HMOs. Member beneficiaries pay a premium which covers Medicare deductible and coinsurance amounts.

During FY 81, 17 HMOs signed contracts to enroll Medicare members. This brought the total contracting HMOs to 59. Medicare membership in HMOs increased during FY 81 from 66,238 to 90,198 or approximately 36 percent. Over 28,000 of these Medicare beneficiaries enrolled through demonstration projects to reimburse HMOs. (See Chapter III, Health Systems Organization.)

During 1981, the Health Care Financing Administration continued its emphasis on beneficiary enrollment in HMOs. Approximately 1,633,200 beneficiaries living in HMO service areas were notified by mail of the availability of HMO services. HCFA also actively encouraged all qualified HMOs to enter into contracts to provide Medicare services. Medicare enrollment in HMOs is expected to grow substantially in the next few years.

G. FRAUD AND ABUSE CONTROL ACTIVITIES

During FY 81, HCFA's only involvement with Medicaid/Medicare fraud was the referral of potential fraud cases to the Office of the Inspector General for possible criminal prosecution, or to the Department of Justice for possible civil prosecution. HCFA's attention has been focused on the detection and prevention of abuse in the Medicaid/Medicare programs with concerted efforts in the areas of:

- integrity reviews involving preliminary case development and abuse case processing;
- administrative sanctions activities (terminating/excluding/suspending certain physicians or practitioners from participation in the Medicare program);
- quality assurance programs;
- increased efforts in various validation reviews;
- identifying overpayments and savings;
- applying computer technology to detect patterns of fraud and abuse; and
- legislative proposals.

Results

In carrying out the responsibilities outlined above, the Health Care Financing Administration achieved the following:

A. Workload

1. Integrity reviews (IRs) processed by HCFA regional offices and Medicare contractors -- 29,623.

2. Overpayments identified as a result of IRs processed -- $4,035,179.

3. Full-scale abuse cases processed by HCFA regional offices and Medicare contractors -- 2,639.

4. Overpayments identified as a result of full-scale abuse cases processed -- $17,622,886.

B. Administrative Sanctions

In FY 81, under Section 1862(e) of the Act, action was taken to suspend 17 physicians/practitioners from participation in the Medicare program. These actions resulted from their conviction of a criminal offense related to involvement in the Medicare and Medicaid programs. (NOTE: Conviction in one program results in a sanction action in both programs.)

Exclusion action (under Section 1862(d) of the Act) was taken against 21 providers, practitioners or other health care suppliers as a result of a finding that they had:

- falsified billing information,
- supplied excess medical services, or
- supplied medical supplies or services which failed to meet professionally recognized standards of health care.

The length of the suspensions/exclusions ranged from 1 year to 25 years. Action was taken to withdraw the suspensions or to reinstate a previously suspended physician/practitioner in 17 cases, and to reinstate a previously suspended provider/supplier in 2 cases.

C. Quality Assurance Programs

Contractor Performance Evaluation Program (CPEP)

In FY 81, HCFA evaluated the performance of Medicare contractors by using the Contractor Performance Evaluation Program. In this program, specified criteria are used to measure contractor Part A (hospital insurance) and Part B (medical insurance) performance in the areas of: bill processing (claims processing - Part B), utilization safeguards - Part B only, provider reimbursement (program payment - Part B), beneficiary services, fiscal administration, and general administration. These criteria are applied uniformly to all contractors within each program. Standards for unit cost of bill (claim) processing, timeliness of bill (claim) processing, timeliness of cost report settlements (Part A only), and quality of claims processing (Part B only) were also established. The process of applying standards and criteria to intermediary performance began on October 1, 1979. Carrier performance initially became subject to the application of standards and criteria on October 1, 1980. Each subsequent year the standards and criteria have been revised and refined to more accurately measure contractor performance.

The CPEP is administered through HCFA's ten regional offices. Throughout the fiscal year, the regional staffs evaluate contractor performance by conducting onsite reviews and analyzing performance data. At the end of the year, Annual Contractor Evaluation Reports (ACERs) are prepared citing CPEP results and are published by the regions for each contractor in their service area.

HCFA uses the results of the application of CPEP criteria and standards to the contractors' performance to identify the contractors having deficient performance. When combined with historical perspective, this process has proven to be an effective tool for identifying those contractors exhibiting a pattern of continuing poor performance with little or no apparent improvement. Establishment of performance goals and monitoring systems, and the practice of conducting face-to-face meetings between senior HCFA staff and executives of poor performing contractors, have achieved overall improvements in contractor operations.

The program integrity performance levels for intermediaries (Part A) seek to ensure that:

1. desk reviews of provider cost reports are performed to verify that providers are receiving appropriate program reimbursement;

2. full-scale indepth audits are performed when appropriate;

3. improper or nonallowable costs are identified and necessary adjustments are made;

4. instances of potential fraud and abuse are identified and referred for investigation; and

5. sanction action (exclusion or termination from participation in the program) is taken when appropriate.

The program integrity performance levels for carriers (Part B) seek to ensure that carriers:

1. monitor the Medicare claims experience for all individual and group physician/suppliers, and acquire statistical data on them and their specialty groups;

2. identify and review those physicians by locality and specialty whose utilization patterns differ from medically recognized standards, criteria and norms;

3. correct any program abuse or overutilization of provider service by recovery of overpayments;

4. prevent further abuse in the utilization of services by educating physicians/suppliers in the acceptable norms of practice;

5. identify those individual providers or types of services where prepayment controls are necessary;

6. refer cases for sanction action (exclusion from participation in the Medicare program) if corrective action has been unsuccessful; and

7. properly handle and refer for investigation, fraud and abuse complaints received from beneficiaries, interested parties, or other sources.

Of 13 Medicare contractors identified as poor performers in FY 1980, one was given an unconditional contract renewal for FY 81 due to significant improvement in performance. Four contractors were given special limited contracts to facilitate future consolidations of workload. Three contractors continued to be on probation, having been given a one-year contract. The remaining five contractors received letters of admonition citing deficient performance and required improvements. Meetings were held with two contractors to discuss long-range improvements in performance. One other contractor, first identified as a poor performer in 1977, was given a special limited contract until an adjacent contractor could assume its service area.

In 1981, 24 poor performing Medicare contractors (including field office sites) were identified by utilizing results from the Part A CPEP and three years of performance data for the Part B carriers. Nine of the 24 contractors had been previously identified in 1980. Of these nine, HCFA replaced one contractor through the nonrenewal process after a history of high cost and poor quality claims processing; two contractors were again given special limited contracts pending workload consolidations; two contractors continued to be on probation; four contractors continued to receive letters of admonition. The 15 newly identified poor performing contractors (including four field offices) received letters of admonition. Meetings were conducted with top management from eight contractors to discuss past performance and plans for future improvements. One other contractor, first identified as a poor performer in 1979, was given an unconditional renewal of its Medicare contract because of sustained improved performance.

FY 81 marked the first year that both intermediaries and carriers, including those in probationary status, were expected to meet the criteria and standards. Any contractor with deficient performance during FY 81 and having a past history of poor performance would be subject to possible adverse contract action or other administration actions designed to achieve improved performance.

Cost Report Evaluation Program (CREP) - Part A

The Cost Report Evaluation Program (CREP) is a comprehensive review program, designed to evaluate the quality of the settlement of provider cost reports (Part A - Title XVIII) by Medicare intermediaries. CREP has been in operation since FY 79 and is now beginning its fourth year.

CREP was initially designed to evaluate hospital cost report settlement and this is still its primary focus. In recent years, the program has been expanded to include home health agency (HHA) settlements.

CREP scores are fed into the CPEP as the only evaluative measure under intermediary audit and reimbursement functions. (CPEP is operated by HCFA's Bureau of Program Operations which evaluates all contractor functions.) The major objectives of the program are to:

1. ascertain that intermediaries are settling cost reports in accordance with program regulations, policies and instructions,

2. discover errors and recoup program monies where applicable,

3. identify the underlying cause of significant errors or problems and make recommendations for improvement, and

4. identify areas in the regulations, instructions, and policies which are either not clear or require clarification or revision.

The reviews are performed by the ten HCFA regional offices, with central office assisting when necessary. Central office staff is responsible for reviewing HCFA's Office of Direct Reimbursement intermediary functions.

The CREP, which is starting its fourth year of operation, was originally designed to evaluate Medicare hospital settlements. There are approximately 6,800 hospitals in the United States which receive about $27 billion as payment for inpatient services to Medicare beneficiaries. CREP is the only program that consistently evaluates this significant cash flow stream. CREP is to be expanded to include Home Health Agency (HHA) settlements, a Systems Test for Alternative Reimbursement (STAR), and will expand into Long Term Care facilities and chain operations.

The program is based on a valid statistical sample of provider cost reports that were settled by Medicare intermediaries within certain designated periods. The program consists of a series of objective procedures that are designed to evaluate significant areas of provider cost reimbursement. Regional office reviewers are required to evaluate all applicable areas based on their analyses of cost reports, desk reviews, intermediary workpapers, permanent files and other pertinent documentation. At the conclusion of the review, a report of findings and recommendations is issued to each intermediary. The report also includes a score which is based on the regional evaluation of the procedure.

During FY 81, there were 66 intermediaries reviewed. The total number of providers reviewed was 785: 531 hospitals serving Medicare beneficiaries, 92 HHAs, and 162 hospitals serving Medicaid recipients. Total estimated dollar recoveries were $6.5 million. As a result of CREP, 19 policy issues were identified for clarification and 14 of those issues have been resolved.

Medicare Part B Quality Assurance Program

The Part B Quality Assurance program was designed to provide a statistically valid and objective procedure for evaluating carrier claims processing performance. The carrier performance measurements data are obtained through systematic carrier reviews of samples of adjudicated claims drawn from each carrier's universe of Part B claims. Regional office subsample reviews verify the accuracy of the performance data from the carrier reviews. Data are provided on the number and type of processing errors and associated dollar amounts for each carrier's claims processing operation and compared on a national basis through consolidating rankings. The data generated constitute an integral part of the Contractor Performance Evaluation Program (CPEP) which, in turn, is a primary mechanism for determining carrier contract renewal, discontinuance, or required program improvements. The quality assurance program also provides carriers with a management tool to improve the quality of their claims processing operation and, in addition, gives HCFA a useful basis for modifying policies and adjusting procedures in the development of a more cost effective and efficient Medicare program.

A national quarterly report is published which ranks carriers based on the cumulative error rates assessed during the most recent 12-month period. Carriers are ranked both on occurrence error rate (processing errors per 100 line items in the universe) and on payment/deductible error rate (dollar errors per 100 dollars of submitted charges in the universe). A penalty figure is included in the payment/deductible error rate when a carrier fails to review all sample claims selected.

The following information is for FY 81.

- Forty-two Medicare Part B carriers (55 processing sites) processed 167 million claims with submitted charges totaling $18.6 billion.

- Carrier occurrence error rates ranged from 4.2 to 20.6. The mean occurrence error rate was 8.5.

- Carrier payment/deductible error rates ranged from 0.5 to 4.2. The mean payment/deductible error rate was 1.9.

- Payment/deductible dollar errors, representing overpayments and underpayments and misapplication of the deductible, totaled $280 million. The mean number of payment/deductible dollar errors was $5.5 million.

- Tracking the 10 carriers with the highest overpayment error rates for the FY 80 review period resulted in $17.9 million in savings during the FY 81 review period.

During FY 81, the total payment/deductible dollar error rate with penalty decreased 0.4 percent from FY 80. The mean carrier error rate decreased from 2.2 to 1.9 percent. A savings to the Medicare Part B program of $27 million occurred in this period due to a decrease in the national overpayment error rate. The FY 1981 national overpayment error rate, based on 51 of 55 carrier locations reporting, was 1.04. This indicates that $1.04 was estimated to be overpaid per $100 of submitted charges. For FY 80, this error rate was 1.24.

Chain Operations

Agencywide efforts were generated to improve HCFA's ability to cope with the many problems associated with the operation of provider chain organizations. "An Overview Report" showed the growth and increasing complexity of chain organizations and issues and the potential that chain operations offer for fraud and abuse. Efforts were undertaken to mobilize HCFA's resources to address problems identified by that report.

Another report, "The Hyatt Strategy," demonstrated the potential for abuse and the need for improvements in HCFA's policy and administrative structure for dealing with such abuse. Based on information in "The Hyatt Strategy," and similar information about other chains, the review of chain operations was established as a priority effort for HCFA. To improve coordination within HCFA and to raise the level of sensitivity of all components to chain issues and problems, "The Chain Note Series" was established. During FY 81, seven chain notes were issued.

D. Program Validation

During FY 81, HCFA continued its extensive validation review program to detect fraud, abuse, and waste among providers, and to identify and correct inappropriate and potentially wasteful policies and procedures. The major types of validation reviews are:

a. Systematic Abuse Reviews (SARS) (noninstitutional): SARS are conducted to identify providers with aberrant utilization or billing practices and to evaluate contract review systems and/or improve such systems.

b. Aberrant Cost Studies (ACS) institutional): During an ACS, providers are reviewed to determine if overutilization or aberrant cost or billing practices exist. Additionally, the appropriateness of contractors/State agency reimbursement and audit processes is evaluated.

c. Program Implementation Reviews (PIRs): These reviews are conducted to determine if reimbursement policies and/or the implementation of such policies contribute to inappropriate levels of reimbursement.

In FY 81, validation review efforts resulted in the following:

- Twenty-four SAR reports were finalized. Medicare overpayments or other program savings of approximately $16.7 million were identified.

- Sixty-seven ACS reports were finalized. Overpayments or other program savings of approximately $9.5 million were identified.

- Thirty-seven PIR reports were finalized. Overpayments or other program savings of approximately $27.5 million were identified.

The above figures reflect a total of 128 final validation reports produced during 1981 which identified total Medicare overpayments or other program savings of $53.7 million. (This figure is the amount of "identified" overpayments and savings. It may not be collectible because of the death or retirement of physicians/practitioners, bankruptcy, dissolution of corporations, flight from prosecution, negotiated settlements, etc.)

E. Identifying Overpayments and Savings - (overpayments and savings identified by the Management Inefficiencies, Program Misuse and Fraud (MIPMF) System)

HCFA reported savings from two major MIPMF initiatives to the Office of Management and Budget during FY 81.

1. Overpayments Identified: The Medicare overpayments and savings identified in FY 81 under the MIPMF initiative totaled $22,605,832. This figure is 140 percent higher than a projected goal of $9.4 million. The MIPMF figure is approximately $1 million more than the total overpayments shown in Section A (above) because overpayments resulting from Medicare fraud cases were included.

2. Savings Resulting from Terminations/Exclusions/Suspensions of Providers - Actual Medicare savings as a result of this initiative totaled $3.18 million in FY 81, compared to projected savings of $3.38 million. This represents a five percent decrease in targeted savings vs. actual savings. This decrease in expected savings is due to a reduction in the termination/exclusion/suspension actions implemented in FY 81 vs. FY 80.

Black Lung Overpayments

HCFA identified substantial overpayments, involving millions of dollars per year, with respect to services that should have been paid for by the Department of Labor (DOL) under the Black Lung program. Instances of payments by both programs for the same services were also identified. HCFA was instrumental in establishing arrangements with DOL to permit recovery of overpayments from DOL rather than from the beneficiary or the provider. A number of recommendations were made regarding temporary and permanent long-

term solutions to the overpayment problems through policy and procedural improvements. However, because of administrative budget limitations, it appears that these improvements will not be made in the foreseeable future.

F. Computer Technology

Software programs have been developed to detect instances of fraud or abuse in the Medicare and Medicaid programs. These programs have detected inconsistent billing practices in the Part A and Part B files; Part A, Part B, and Medicaid files; Part A and Black Lung files; and Part A and Worker's Compensation files.

G. Legislative Proposals

Several significant legislative proposals were developed in FY 81, including:

- Denial of Payments to a Provider for Services Ordered by a Sanctioned Physician

  This proposal would authorize the Secretary to deny reimbursement under Medicare and to deny Federal Financial Participation under Medicaid for all items and services ordered by a physician during the period that such physician was suspended or excluded from Medicare program participation under existing authorities. The proposal would also allow denial of Medicare reimbursement and Federal Financial Participation under Medicaid for inpatient services whenever the patient was admitted to the provider of such services by a suspended or excluded physician. Current authorities prohibit Medicare and Medicaid reimbursement directly to a suspended or excluded physician. However, the sanctioned physician may continue to abuse the Medicare and Medicaid programs by ordering unnecessary or excessive items or services and unnecessary hospital admissions for beneficiaries and recipients. This proposal would address this problem.

- Secretary's Authority to Terminate a Provider's Agreement

  This proposal would enable the Secretary to terminate those health service providers owned, controlled, or operated by an individual who has been convicted of criminal offense related to his/her involvement in the Medicare or Medicaid program. This proposal is needed to correct a technical deficiency in current similar authorities.

- Denial of Program Participation to Entities Where Owners or Certain Other Individuals Have Been Convicted of a Program Related Offense

  This proposal would correct a gap in existing legislation. The Secretary would be allowed to deny program participation to

suppliers and other entities where a person, with significant ownership or control interest in the supplier or other entity, or who is an officer, director, agent, or managing employee of the entity, has been convicted of a program-related criminal offense.

- Civil Money Penalty for Medicare and Medicaid Fraud and Withholding of Payments for Certain Medicaid Providers -- see Appendix G, Significant Legislation Enacted in FY 81, Omnibus Reconciliation Act of 1981, Section IV.

H. BENEFICIARY SERVICES

Established in December 1979, the Office of Beneficiary Services' (OBS) primary objectives are:

- Enhancement of beneficiary understanding of Medicare and Medicaid programs
- Coordination of central office and regional office beneficiary related activities
- Maintenance and improvement of communications between HCFA and beneficiary organizations
- Initiation and promotion of innovative techniques for dissemination of program information
- Provision of training and support for volunteer groups
- Recognition of superior performance in the area of beneficiary services by Federal workers and private sector workers and volunteers.

OBS has made progress in all of these areas over the past year, but most significantly in the areas of volunteer training (Medigap), updating and disseminating program information, and liaison with beneficiary groups (e.g., AARP, NCSC, etc.).

Medigap

"Medigap" initiatives were generated as a result of investigations by Congress, the Federal Trade Commission and the General Accounting Office. Abuses in the merchandising and selling of health insurance policies designed to supplement Medicare are being addressed on two fronts. In an effort to stimulate the States to take a more active approach to the problem, Congress enacted a provision (Section 507 of P.L. 96-265) establishing a voluntary HHS program for the certification of "Medigap" policies. This legislation is now being implemented by HCFA's Bureau of Program Operations.

On the other front, HCFA developed an education program to better inform Medicare beneficiaries about (1) Medicare coverage, (2) the major gaps in Medicare coverage, (3) the various types of private

health insurance designed to supplement Medicare and (4) comparative shopping hints to use when purchasing private supplemental health insurance. To implement this initiative, OBS designed, developed, and produced the 68-page training text, Medicare and Private Health Insurance, based on a pamphlet developed jointly with the National Association of Insurance Commissioners (NAIC). This text, plus accompanying visual aids and a checklist for comparing policies, served as the basic material for a nationwide program to train counselors and volunteers who, in turn, assist Medicare beneficiaries on private health insurance decisions. To date, HCFA regional office Medigap coordinators (who received their initial Medigap training at central office) have conducted more than 250 training sessions in all 50 States, the District of Columbia and Puerto Rico. Approximately 13,000 attendees have received Medigap training through this program.

A continuation of another facet of the Medigap initiative has been the distribution of over 6,000,000 copies of A Guide to Health Insurance for People with Medicare, the information pamphlet which was first produced in 1979 in conjunction with NAIC.

Updating, Revising, and Improving Beneficiary Informational Material

With the aid of recommendations from private sector beneficiary groups obtained through a FY 80 survey, OBS is working on a complete revision of Your Medicare Handbook. In the interim, 3,000,000 copies of an updated, partially revised 1981 Medicare Handbook have been printed and distributed to Social Security district offices, Medicare contractors, and new Medicare enrollees. Also, as an interim measure and because of the special information needs created by the 1980 and 1981 Reconciliation Acts, OBS prepared and distributed Recent Changes in Medicare. One million copies of this pamphlet, describing the latest and most important legislative changes affecting the Medicare population, were distributed to SSA district offices and Medicare contractors.

Other new or revised information items produced by OBS in FY 81 included:

- The Directory of Beneficiary Organizations - a profile of national organizations representing or relating to Medicare and Medicaid beneficiaries. This publication is primarily for internal distribution and use.

- Where to Get Answers at HCFA, 1981 - the second edition of a directory containing an alphabetical listing of subjects or problem areas together with the HCFA component best able to handle the issue. This directory is primarily used by private sector organizations.

- Medicare/Medicaid Notes - a monthly fact sheet explaining specific issues or recent changes in Medicare or Medicaid policy and procedures. This is distributed to all HCFA regional offices and 33 national organizations (e.g.,

American Association of Retired Persons, National Council of Senior Citizens) which have publications or periodicals going to their members.

Beneficiary Casework

OBS continues to function as a central office ombudsman for special beneficiary inquiries and problem cases. Most inquiries are telephone referrals from the Office of the Administrator, HCFA; Office of the Secretary, HHS; the White House; and Congress. Many inquiries come directly from beneficiaries seeking help with errors in their records resulting in loss of eligibility or incorrect premium billings necessitating a review and correction of their Medicare records. There is also a high incidence of complaints about what are seen as deficiencies in program coverage, e.g., the lack of prescription drug or nursing home coverage under Medicare. In such cases, efforts are made to guide the caller to other resources for financing the necessary medical services. Other inquiries relate to difficulties with Medicare contractors and problems involving submission of, and reimbursement for, Medicare claims. In all these instances, the ombudsman function provides a valuable service for Medicare beneficiaries, many of whom have difficulty dealing with the complexities of the program.

Liaison With Beneficiary Organizations

In FY 81, OBS stepped up its efforts in the area of communications with beneficiary organizations. In addition to soliciting their input and participation in the development of program policy and procedures, ten separate mailings of Medicare informational materials were sent to the more than 200 national and regional beneficiary groups on the OBS mailing list. OBS representatives attended 27 national organization conferences and participated in 5 organization panel discussions on Medicare and related health care issues.

Beneficiary Services Awards

The Beneficiary Services Awards were established to provide special recognition to individuals or groups for either outstanding performance in service to beneficiaries or for a major contribution in the area of beneficiary services. The awards serve to provide an incentive to develop innovative ideas, resources, and programs in assisting beneficiaries.

OBS recognized outstanding beneficiary service again this year, as part of HCFA's Annual Awards Ceremony. The Beneficiary Service Award, which includes a monetary grant, was presented to a HCFA employee for development of outstanding promotional materials for the Early Periodic Screening, Diagnosis, and Treatment (EPSDT) program and increasing beneficiary access to services. In addition, 12 other HCFA employees received Certificates of Merit and 13 private citizens received Certificates of Merit for their contribution to the improvement of services in the Medicare and Medicaid programs. This final group of 13 represented Medicare contractors, State agencies, and beneficiary groups from 11 different States.

I. MEDIGAP

Background

Although the Medicare program provides health insurance protection to its beneficiaries, this protection was not intended to be all inclusive. The Medicare statute limits the kinds of services covered and sets cost sharing requirements for beneficiaries, such as deductibles and coinsurance. In order to fill the "gaps" in Medicare, beneficiaries often buy private health insurance, or Medigap policies, to supplement Medicare.

Private health insurance policies marketed to the elderly generally fall into three categories: Medicare supplement, indemnity, and dread disease. A Medicare supplement policy, referred to as "wraparound coverage," is the only health insurance which truly supplements Medicare's benefit structure. Designed to fill the coverage "gaps" in Medicare, these policies usually pay some or all of Medicare's deductible and co-insurance amounts and a percentage of actual charges unmet by the Federal insurance program. However, none of these policies cover physician charges above the rates allowed by Medicare, or for services not covered by Medicare, such as routine physicals and custodial care. Many insurance officials recommend one "good" Medicare supplement policy as the best insurance protection for most senior citizens. Another common form of insurance purchased by the elderly is an indemnity policy which usually pays a fixed amount of money for each day of hospitalization. A dread disease policy offers coverage when a specific disease occurs. Cancer insurance represents the most prevalent dread disease policy sold today. In most cases, these policies offer fragmented, narrow protection at a low rate of return.

Congressional studies conducted before 1980 found many abuses in the sale and marketing of these Medigap policies. There were no Federal standards and few States enacted laws to regulate insurance policies that supplement Medicare. Medigap policies come in many forms, offering a wide variety of benefit packages. Although many offer adequate protection to the elderly, some offer inordinately small return in benefits for what is paid in premiums, and others were marketed using misleading information as to scope and extent of the benefits offered. Sanctions regarding fraud and misrepresentation in the sale of health insurance policies are generally available in most States but are often too limited.

Medigap Law

To combat the abuses identified, Congress enacted in 1980 Public Law 96-265 which added Section 1882 to Title XVIII of the Social Security Act. This statute is designed to encourage States to adopt minimum standards for Medicare supplement policies. It does not specifically address indemnity and dread disease policies except through research and the possible need for future legislation.

Historically, the regulation of the business of insurance has been the responsibility of States. The McCarran-Ferguson Act of 1954 generally excludes the business of insurance from the Sherman, Clayton and the Federal Trade Commission Acts. Enactment of the Medigap law, however, represents a balanced approach to a national insurance problem by continuing to recognize States' rights as well as Federal responsibility.

Basically, the Medigap law provides for creation of the Supplemental Health Insurance Panel (Panel), the establishment of a Federal Voluntary Certification Program, and establishment of Federal criminal penalties. The law also provides that information be supplied to beneficiaries, enabling them to evaluate the value of Medicare supplemental policies. In addition, various reports must be submitted to the Congress to address the Panel's findings, the Voluntary Certification Program, the criminal penalty provisions, and the results of studies evaluating the comparative effectiveness of various State approaches to regulation of Medicare supplement, indemnity, and dread disease policies. The Health Care Financing Administration (HCFA) is responsible for implementing the Medigap law.

The Panel consists of a designee of the Secretary, Department of Health and Human Services, and four State Insurance Commissioners appointed by the President. It is responsible for determining whether a State's Medicare supplement regulatory program meets standards contained in the June 1979 Model Regulation to Implement the Individual Accident and Sickness Insurance Minimum Standards Act adopted by the National Association of Insurance Commissioners (NAIC) and certain other standards. Section 1882 expands upon the model's requirements by extending its jurisdiction to certain group policies and by adding loss ratio requirements for both group and individual policies. The Panel is legally required to report its findings concerning which States cannot be expected to have established an approved State regulatory program. States having an approved program are exempt from the Federal Voluntary Certification Program.

The Federal Voluntary Certification Program, effective July 1, 1982, will be applicable only to those insurers in States not having a Panel approved regulatory program. Under the Voluntary Certification Program, insurance companies may voluntarily submit Medigap policies to HCFA for review. Policies certified can display an emblem indicating that the policy meets minimum Federal standards for Medicare supplement policies.

Provisions of the law also establish Federal criminal penalties for engaging in certain fraudulent or abusive activities. Penalties are provided for furnishing false and misleading information to obtain certification; for misrepresentation as an agent of the Federal government to sell insurance to supplement Medicare; for knowingly selling insurance policies whose benefits would be reduced or denied because they duplicate benefits under another policy held by the purchaser; and for knowingly advertising, soliciting, or offering mail order policies in a State, without approval of the State Insurance Commissioner. Anyone convicted of engaging in fraudulent or abusive practices is subject to a fine of up to $25,000 and/or imprisonment for up to 5 years.

Reporting Requirements

Section 1882(f)(1)(C) of the Social Security Act requires the Secretary to report to Congress study results concerning various State approaches to the regulation of health insurance and the need for standards of certification for health insurance policies, other than Medicare supplement policies, sold to individuals eligible for Medicare. Pursuant to the statutory mandate,

HCFA has undertaken a study of consumers and insurers to assess the effectiveness of State regulation of health insurance, with emphasis on insurance sold to Medicare beneficiaries. The study will be conducted in six States selected with the assistance of the NAIC. The study and its analysis were scheduled for completion by early 1983, when a report will be forwarded to Congress. (See Chapter III discussion of Medigap.)

Section 1882(f)(2) of the Social Security Act requires the Secretary to submit to Congress not less than every two years a report evaluating the effectiveness of the certification procedure and the criminal penalties established under this section.

Penalty Provisions

Representatives of HCFA, the Office of the Inspector General (OIG), the Department of Justice (DOJ), and the Social Security Administration (SSA) developed a coordinated procedure for screening, investigating, and prosecuting cases arising under the penalty provisions provided in Section 1882(d) of the Social Security Act.

HCFA, through its regional offices, is responsible for the preliminary screening of complaints and for providing information about complaints to the appropriate State insurance department. The OIG is responsible for investigation of cases referred by HCFA and for coordinating investigatory activities with the State insurance departments. Further, OIG is serving as liaison between State insurance departments and the U.S. Attorneys. The Fraud Section, DOJ, has alerted all U.S. Attorneys of the existence and importance of the Medigap law.

CHAPTER III. REPORT ON RESEARCH, DEMONSTRATIONS AND STATISTICS

During FY 81, HCFA's Office of Research, Demonstrations and Statistics (ORDS) directed over 200 intramural and extramural projects that studied, demonstrated and evaluated reimbursement, coverage, eligibility and management alternatives to the present structure of the Medicare program. (The research, demonstration and evaluation components of ORDS were realigned as the Office of Research and Demonstrations (ORD) shortly after FY 81.) ORDS also measured and evaluated the impact of HCFA's programs on (1) beneficiary use of program benefits and access to services, and (2) provider charges and program reimbursements for the use of these benefits. In addition, ORDS monitored overall national health care expenditures and prices, and provided actuarial projections of the future costs of current HCFA programs.

As part of its ongoing research, demonstrations and evaluation program in FY 81, HCFA approved over 80 new projects. These activities are described below in each of nine major research and demonstration program areas. Following that discussion is a section devoted to data base and statistical activities and a description of HCFA's publications program.

Research, Demonstrations and Evaluations

Research and experimentation in support of the Medicare program is authorized in the Social Security Act and the Social Security Amendments of 1967 and 1972, as well as in the National Health Planning and Resources Development Act of 1974. HCFA develops and tests innovative ways to promote efficiency and quality in the Medicare and other HCFA programs. It assesses the impact of HCFA programs on health care costs, program expenditures, beneficiary access to services, health care providers, and the health care industry. These research and demonstration projects test and evaluate the effects of alternatives to present reimbursement, coverage, eligibility and management policies of the Medicare program. Reports are written to describe and analyze the use and costs of program benefits. Studies are undertaken to explore in greater detail the structure and dynamics of the various sectors of the health care industry.

During FY 81, HCFA spent $38.6 million for grants and contracts to conduct research, demonstration and evaluation projects in the following nine program areas:

- Beneficiary Impact and Awareness
- Health Systems Organization
- Hospital Costs
- Industrial Organization and Reimbursement
- Integrated Data Management Systems
- Long Term Care
- Physician Reimbursement
- Program Evaluation
- Quality and Effectiveness

Although projects related primarily to Medicare are discussed in this report, information regarding Medicaid is also provided where it enhances the information being presented. Additional information on HCFA research and demonstration projects can be obtained from the HCFA publications office identified at the end of the chapter.

1. Beneficiary Impact and Awareness

HCFA maintains a research and demonstration program to measure the impact of Medicare on the beneficiaries and to assess beneficiary awareness of program goals. Ongoing studies are undertaken to measure the financial burden on Medicare beneficiaries for medical care. Studies are designed to measure the burden on the beneficiaries for cost-sharing amounts of Medicare covered services as well as costs for noncovered services, and to compare these costs with program outlays.

Detailed analyses have been made of physician assignment rates to analyze this aspect of beneficiary burden. Assignment rates are studied by geographic area, by specialty of physician and by other factors that are known to influence physician acceptance of assignment. A compendium of data on physician services, including trends in assignment rates, is nearing completion. This compilation of data on assignment rates shows wide variations in assignment rates by State, with neighboring States often showing large differences. This compendium also shows the relative impact of liability from unassigned claims, from the Part B deductible, from coinsurance requirements and from the Part B premium.

HCFA also analyzes total out-of-pocket costs for Medicare covered services and for other noncovered services. These analyses have been presented in the Spring 1980 Health Care Financing Review, "Differences by Age Groups in Health Care Spending," and in the Medicare Program Statistics Annual Series Report, "Medicare Summary: Use and Reimbursement by Person, 1976-1978." These reports show the impact of cost-sharing under Part A and Part B and out-of-pocket costs for noncovered services. (The studies described above are conducted internally, and are directed toward assessing impacts on HCFA beneficiaries. Research and demonstrations primarily on physician reimbursement may be found under Section No. 7, Physician Reimbursement.)

Ongoing studies are undertaken to better understand access to Medicare services. Studies by race show that differences among races in use of services are diminishing, as shown in the article "Equal Treatment and Unequal Benefits: A Re-Examination of the Use of Medicare Services by Race, 1967-1976," in the Health Care Financing Review, Winter 1981.

Large differences in reimbursements for Part B services are also found by State. Per capita reimbursement for beneficiaries in some States, e.g., California, average 2 to 3 times more than reimbursements for beneficiaries in other States, e.g., West Virginia.

Access to medical care resources varies significantly by geographic area. In 1981, the number of Medicare-certified short-stay hospital beds per 1,000 Medicare hospital insurance beneficiaries ranged from 31 in the New England States to 41 in the West South Central States. Certified skilled nursing facility beds per 1,000 of these beneficiaries ranged from 2 in the West South Central States to 30 in the Pacific States. Eleven States had more than 100 certified home health agencies and 10, including the District of Columbia, had 15 or fewer agencies.

2. Health Systems Organization

Projects within this program area seek to improve the access of Medicare beneficiaries to health services, and at the same time, provide incentives to reduce the total cost of health care. Some studies explore alternative approaches to the organization and delivery of health care, while others modify payment methods for current health care institutions and practitioners.

In FY 81, HCFA supported a series of demonstrations in alternative organizational models. Demonstrations with health maintenance organizations (HMOs) are designed to promote competition within the health care marketplace by providing incentives for increased enrollment of Medicare beneficiaries and to reduce Medicare benefit costs by instituting alternative reimbursement methods. Due to their potential for cost-savings, HMOs can often offer extra benefits or cost-savings to beneficiaries and yet contract with Medicare at a reimbursement rate lower than the average fee-for-service cost. Preliminary findings from the demonstration are:

(1) Medicare beneficiaries will enroll in HMOs if benefit packages are attractive. Over 28,000 Medicare beneficiaries have enrolled at just four sites.

(2) HMOs will contract with HCFA to enroll Medicare beneficiaries if (a) current reimbursement policies are modified to permit risk reimbursement without requiring the preparation of the Medicare cost report, and (b) flexibility is granted that changes current reporting requirements.

(3) HMOs which enter into risk contracts without prior experience with Medicare beneficiaries have difficulty projecting accurate hospital utilization rates. One HMO estimated current year losses at $2 million, attributed to much higher than expected hospital utilization. HCFA will reinsure future losses by sharing in the costs of hospital days in excess of projections. The arrangement for cost-sharing is a sliding percentage, with HCFA's share decreasing as the number of hospital days in excess increases.

Three major demonstration initiatives were launched in the area of expanding ambulatory service coverage to Medicare beneficiaries: Alcoholism, Mental Health Services, and Urban Health Clinics services.

Both the Alcoholism Services and Mental Health Services demonstrations are aimed at testing the cost-effectiveness of providing Medicare and/or Medicaid coverage for mental health services provided in ambulatory centers that currently do not have provider status. The hypothesis in both projects is that services can be provided effectively and efficiently at less cost in these settings than in traditional hospital inpatient or outpatient treatment settings.

HCFA has initiated its Urban Health Clinics demonstration which will examine the relative advantages and disadvantages of reimbursement on the basis of costs and fee-for-service for physician-directed clinics employing physician assistants or nurse practitioners. These clinics will be located in medically underserved areas in two to three States. These areas are experiencing shortages of medical practitioners, and beneficiaries often use hospital outpatient and emergency rooms to obtain primary care. Urban health clinics staffed with physician extenders may provide services in a more cost-effective manner.

HCFA and the Robert Wood Johnson Foundation continued to support demonstrations to determine whether primary care clinics affiliated with municipal outpatient departments could improve access to care and contain costs in urban areas. Twenty clinics in five cities are currently providing routine and ancillary services in this demonstration. In the aggregate, ancillary charges have been highest for dentistry and dentures, followed by pharmacy. Four of the five participating cities have attained the Robert Wood Johnson Foundation criteria for success: their Municipal Health Services Project (MHSP) clinic costs per visit are two-thirds or less of the cost per visit for that city's municipal hospital outpatient department and emergency room services. In addition, it was originally hypothesized that the improved access to primary care clinics would result in a decrease in the total cost and utilization of inpatient and emergency room services. From preliminary results, it appears this hypothesis is true in four of the cities.

HCFA supported three demonstrations which change end-stage renal disease (ESRD) benefits by extending coverage to the services of a dialysis aide for maintenance dialysis sessions performed in the patients' homes. The primary purpose of all three demonstration projects was to test whether providing this extra benefit results in more patients choosing home dialysis as a treatment option. Preliminary results indicate that home patients, as a percentage of total patients, have increased since the implementation of the demonstration in all sites. Only one contractor has reported cost information. In four of the eight facilities participating in one of the demonstrations, the cost of facility dialysis was higher than the cost of home dialysis (including the costs of partners and assistants). If only 25 or 30 percent of the patients needed assistants, and if partners (family members) were not paid, it is estimated there would be a cost-savings in six of the eight facilities, and in two of them, cost-savings would exceed 20 percent. The other demonstration is being evaluated for final results from the demonstrations. Their report will include an analysis of utilization, cost and quality of care.

The final report of the evaluation of the Colorado Clinical Psychology/ Expanded Mental Health Benefits Experiment was completed in FY 81, and the final report summary was published as a HCFA grants and contracts report, Evaluation of the Colorado Clinical Psychology/Expanded Mental Health Benefits Experiment: Executive Summary.

The experiment tested two changes in Medicare mental health benefits: (1) a reduction in the outpatient mental health services copayment rate from 50 percent to 20 percent; and, (2) recognition of clinical psychologists as independent practitioners. The study found no administrative barriers to implementation, and no significant utilization changes for either experimental benefit. Reducing the copayment to 20 percent would increase net Medicare costs by $.65 per beneficiary per year. Net cost to Medicare of recognizing clinical psychologists as independent practitioners was estimated at $.04 and $.07 per beneficiary per year for 50 percent and 20 percent copayment, respectively. However, the peer review process was costly and prospective review of treatment plans was found infeasible. Fewer than three percent of beneficiaries surveyed identified mental health services as their first choice for Medicare benefit expansion. Coverage of prescription drugs was the first choice for 25 percent.

3. Hospital Costs

Total spending for all hospital care in the United States rose from $27.8 billion in calendar 1970 to $100.4 billion in 1980, a 13.7 percent average annual rate of increase (Health Care Financing Review, September 1982). This represents an increase of 16.6 percent from the 1979 spending level of $86.1 billion. Of these amounts,

- Medicare spent $5.1 billion in 1970, accounting for 18.3 percent of total hospital expenditures. This increased to $26.0 billion in calendar year 1980, accounting for 25.9 percent of total hospital spending.

- Medicaid (State and Federal) spent $2.2 billion in 1970, accounting for 8.1 percent of all hospital spending. This increased to $9.4 billion in 1980, accounting for 9.5 percent of all hospital spending.

Together, Medicare and Medicaid accounted for 35.4 percent of all spending for hospital care in 1980.

HCFA carried out research on hospital costs during FY 81. For example, it was found that price inflation contributed most to the increase in hospital expenditures in 1980. The National Hospital Input Price Index, a fixed weight index developed by HCFA that measures the prices of goods and services used by hospitals in providing services, rose 11.9 percent in 1980. This was a more rapid rate of inflation than exhibited by the GNP fixed weight price index. The growth in the hospital input price index was largely due to an 11 percent increase in hospital worker wage rates and rising energy costs.

Over 20 percent of the 1980 increased growth of spending for hospital care was accounted for by an increased use of hospital services. Inpatient days in community hospitals were 3.6 percent greater than in the previous year, the highest annual increase since the implementation of Medicare and Medicaid in 1966. (See National Health Expenditures, 1980, Gibson and Waldo, Health Care Financing Review, September 1981.)

HCFA's research and demonstration program attempts to develop a better understanding of hospital costs across hospitals and over time, and to explore alternative reimbursement systems to contain hospital costs. One of the principal differences among hospitals is their variation in kinds of patients treated (case mix). HCFA has funded and continues studies designed to develop better methods of measuring case mix across hospitals. This includes the definition of a new set of diagnostic related groups based on an International Classification of Disease-9-Clinical Modification (ICD-9-CM) coded national data set, and a study at Blue Cross/Blue Shield of Western Pennsylvania designed to study generalized patient management paths. Other projects in this area of research have also been funded to Johns Hopkins University and George Washington University. All of these projects focus on the development of methods for classifying patients into categories which are clinically distinct and homogeneous in terms of the cost of care. In addition, the Office of Research has engaged in extensive internal research on the definition of the measurement of hospital case mix for Medicare patients. In addition, a major study of hospital classification methods at the University of Washington was completed during 1981.

Office of Research intramural work has been completed on the Medicare Nursing Differential. Specifically, this study investigated whether hospitals with more qualifying Medicare patients do have higher per diem routine nursing salary costs. Analysis of 1979 Medicare cost reports from over 4,500 hospitals showed that the proportion of hospital routine patient days consumed by Medicare patients was weakly associated with per diem hospital routine nursing salary costs. This weak and usually positive statistical association was hardly ever statistically significant at conventional levels. Thus, the study concluded that there was no empirical support for the continued payment of the Medicare Routine Nursing Differential. In addition, this study found that higher routine nursing salary costs per day were positively associated with more interns and residents per bed, nonprofit status, State and local government control, and a high ratio of special care unit patient days.

Another internal research study of financially troubled hospitals, using Medicare Cost Report Data and American Hospital Association data, was also completed during 1981. This analysis showed that hospitals which have ratios of expenses to revenues greater than 1.0 tend to have fewer than 100 beds, and to be located in the West, situated in rural

areas, outside medically underserved areas, and controlled by State and local governments. However, distribution of actual dollar losses was somewhat different. Hospitals accounting for the bulk of the overall financial losses appear to have more than 250 beds, and to be located in the West, situated in urban areas, outside medically underserved areas, and controlled by State and local governments.

HCFA also carries out demonstrations in the area of hospital costs which include the development of alternative hospital payment methods and the demonstration of their effects on hospital cost behavior. The development and testing of both voluntary and legislatively mandated budget/rate review programs has been supported by HCFA on both a Statewide and regional basis.

HCFA currently is participating in five hospital demonstration programs through Medicare and/or Medicaid waivers of standard Medicare-Medicaid reimbursement principles. Both Medicare and Medicaid waivers are in effect Statewide in Maryland. The Maryland demonstration is expected to provide information on the long term effects of an all-payor State rate setting program on the rate of increase in hospital costs and the financial position of hospitals. In New Jersey, both Medicare and Medicaid are participating in the demonstration of a diagnosis specific hospital payment system, based on diagnosis-related groups (DRGs). All New Jersey hospitals are under this case mix reimbursement system. Medicare and Medicaid reimbursement principles have been waived in the Rochester and Finger Lakes areas of New York to allow the testing of two voluntary programs. These projects will help determine whether an areawide budget system will be effective in controlling hospital costs and whether local decision making can effectively allocate financial resources between hospitals to cover the cost of new services.

A Medicare and Medicaid demonstration was completed in Washington in 1981. This program tested the effects of different payment methods within a State rate setting environment. Developmental contracts were also completed with Connecticut, Massachusetts and New York. These developmental programs were designed to improve the operation of the State programs.

While ORD analysis of American Hospital Association data indicates that the expense per adjusted admission for U.S. community hospitals increased at an annualized rate of 11.8 percent from 1977 to 1980, States which received support for rate-setting activities through HCFA's R&D program were generally lower:

Connecticut	9.7 percent
Maryland	10.4 percent
Massachusetts	10.0 percent
New Jersey	10.2 percent
New York	9.3 percent
Rhode Island	9.7 percent
Washington	11.0 percent

Under contract, HCFA has undertaken a comprehensive evaluation of nine State and regional rate setting programs, including initiatives without Federal funding. This evaluation will trace the costs and savings of each program as well as their effects on the composition and availability of hospital services, the financial stability of hospitals, the quality of care, and the substitution of medical services rendered outside hospitals. Initial reports have been published, including case studies and a comparative analysis focused on the hospital rate setting programs. Preliminary quantitative analysis illustrates that most mandatory hospital rate setting programs have effectively lowered the annual rate of increase in cost per admission by two to four percentage points. Forthcoming articles in Health Care Financing Review will address rate setting impacts on hospital employment, volume of inpatient services, and expansion of facilities and services. (For details, see A Comparative Review of Nine Prospective Rate Setting Programs, a HCFA grants and contracts report of August 1980, and Coelen and Sullivan, "An Analysis of the Effects of Prospective Reimbursement Programs on Hospital Expenditures," Health Care Financing Review, Winter 1981.)

4. Industrial Organization

HCFA supported continuing research in FY 81 into the effects of Medicare reimbursement policies on the various industrial organization components of the health care sector. These components include durable medical equipment, clinical laboratories, health insurance, long term care, end-stage renal disease and hospital purchasing practices. Studies in these areas are considering the market structure, conduct and performance of each industry in order to ascertain the extent to which they adhere to, or deviate from, the competitive norm.

HCFA has provided a three-year grant to study the determinants of current and future expenditures on durable medical equipment by HCFA and by program beneficiaries. This project has six basic objectives:

1. To construct and estimate a model of the demand for durable medical equipment and to use that model to predict future expenditures by HCFA and its program beneficiaries on durable medical equipment.

2. To analyze the organization, structure, conduct and performance of the durable medical equipment supply industry.

3. To develop recommendations concerning the feasibility and desirability of rental or purchase of specific items of durable medical equipment in light of economic, medical and other evidence.

4. To analyze the impact of the current Medicare Part B reimbursement and claims screening process on the supply and demand for durable medical equipment.

5. To describe State Medicaid regulations and other State programs and policies which affect HCFA expenditures for durable medical equipment and to explore the interaction between Medicaid and Medicare program policies and expenditures.

6. To develop a research protocol addressing the use of durable medical equipment in the home as a substitute for hospital or nursing home care.

Another project has completed its investigation of the effects of coverage by Medicare and other insurance on the price, frequency, and location of laboratory tests. This study has found a direct correlation between the extent of Medicare and insurance coverage and the price, frequency and location of laboratory tests.

Beginning in the middle of FY 80 and continuing through FY 81, HCFA's intramural research has also pursued research on the industrial organization of the long term care market and various other aspects of long term care. Initial findings indicate that aggregate long term care needs and costs will continue to grow due to demographic changes and trends already manifested in society. Present financial incentives make the nursing home the primary focus of provision for publicly financed programs. However, the evidence is not convincing that alternative modes of long term care are less costly to the public sector. There is no reason to believe that there are easy solutions to the sometimes mutually conflicting public policy goals of cost containment, access and quality, although this study suggests alternative reimbursement mechanisms for a more efficient achievement of these public policy goals. The cost emphasis in these reimbursement mechanisms will be centered on unit costs.

HCFA has funded two studies on the incentives facing providers and recipients in the End-Stage Renal Disease program. Evidence indicates that present provider and recipient incentives could be modified to make the program more efficient. Also, ORD has funded a study on those not covered for end-stage renal treatment under the Medicare program.

Finally, a contract was let to inquire into hospital purchasing practices. Indications were that hospitals are becoming more efficient in their purchasing practices, even though there remain wide variabilities in the attainment of such efficiencies.

5. Integrated Data Management Systems

HCFA supports the development and testing of uniform systems to collect and process billing and discharge data from hospitals and other institutions participating in Medicare and Medicaid. Uniform data systems will improve the Federal program capacity to reimburse for services in a manner that encourages efficient delivery at the same time that it improves the capacity to detect fraud, abuse, and error. These systems

will also help eliminate paper transactions by using automated processes and will improve dissemination of data to multiple Federal, State and local users.

In FY 81, HCFA continued its efforts to develop model integrated data management systems to collect, process and merge uniform discharge and billing data from hospitals. In addition to ongoing grants with State government agencies in New York, South Carolina, Vermont, Missouri, Iowa, Minnesota, Maine, and with nonprofit institutions, Dartmouth and the American Health Planning Association, HCFA awarded grants in FY 81 to nonprofit institutions in Massachusetts, Maryland, and to the Lutheran Hospital Society of Southern California. Also, phase one of the cross-cutting evaluation of the demonstrations for integrating data management systems was completed in FY 81.

HCFA expects integrated data management systems to demonstrate improved approaches (1) to minimize reporting burden especially related to bill and discharge information, (2) to improve timeliness and quality information to multiple users, e.g., third party payors and State agencies, (3) to reduce the cost associated with multiple processing of identical information, and (4) to promote health data standards across the industry.

HCFA has continued to work with industry to develop a billing form to be used by providers to bill all third-party payors. HCFA shares their belief that uniform billing will be more cost-effective than existing bill practices. The National Uniform Billing Committee, of which HCFA is a member, met in late FY 81 and developed a uniform bill called UB-82. The UB-82, with the associated data set, definitions and instructions, will be commented upon by the health care community including Medicare intermediaries and Medicaid fiscal agents. It is expected that uniform billing will minimize burden to hospitals participating in Medicare and Medicaid.

6. Long Term Care

Total spending for nursing home care in the United States rose from $4.7 billion in calendar year 1970 to $17.6 billion in 1979 and $20.6 billion in 1980. This represents a 15.9 percent average annual rate of increase (Health Care Financing Review, September 1982). Of these amounts:

- Medicare spent approximately $0.3 billion in 1970, accounting for 5.6 percent of total nursing home expenditures. This increased to approximately $0.4 billion in both calendar years 1979 and 1980, accounting for approximately 2 percent of total nursing home spending.

- Medicaid (State and Federal) spent $1.4 billion on nursing homes in 1970, which antedated the enactment of an Intermediate Care Facility (ICF) benefit under Title XIX in 1972. This increased to $4.9 billion in 1975, accounting for 47.7 percent of total nursing home spending in that year, and reached $10.2 billion in calendar year 1980, accounting for 49.2 percent of total nursing home spending in 1980.

- Together, Medicare and Medicaid accounted for 51.0 percent of all spending for nursing home care in 1980.

Figures on total spending for home health care in the United States are not available at this time; the following represents statistics from the Medicare and Medicaid programs:

- Medicare spent approximately $82 million on home health services in 1970. This rose to $661 million in CY 1979, and increased by 22.2 percent to $808 million in CY 1980.

- Medicaid spent approximately $17 million on home health care in 1970. This rose to $264 million in FY 1979, and increased by 25.8 percent to $332 million in FY 1980.

HCFA's research in long term care can be divided into three categories: (1) the effects of Medicare and Medicaid policies on long term care quality, utilization and costs, (2) the determinants of demand for long term care, and (3) surveys of long term care needs.

1. Effects of Medicare and Medicaid Policies on Long Term Care Quality, Utilization and Costs

   Research is being funded which will provide information needed to improve reimbursement and regulatory policies. A number of projects are assessing the effects of current policies on costs, quality and utilization.

   Research determining the impact of cost containment efforts by nursing home administrators on the cost and quality of care is expected to indicate how contextual factors (facility size and external pressures) affect administrators' programs to contain costs.

   Other projects will develop procedures for cost comparisons among long term care alternatives (e.g., nursing homes and home health services). In order to compare costs, various methods of measuring the types of clients served (case mix), the resource utilization common to particular groups, and the quality of care are being developed.

   Preliminary findings indicate that specific groupings of facilities appear to emphasize provision of care for certain similar types of patients; for example, hospital-based facilities generally have older and more functionally disabled residents than free-standing facilities. Examples of the questions to be answered by these research projects are:

   - What is the relationship among case mix, quality and costs in nursing homes?

   - Are the higher cost limits allowed by Medicare for hospital-based as compared to free-standing skilled nursing facilities justified by differences in the cost of care for their respective case mixes?

- o If case mix differences do not account for the cost differences, what factors (e.g., staffing patterns) do explain the differential?

- o Is home health care a cost effective substitute for nursing home care for certain categories of patients?

Additional research is looking at the respective roles of Medicare reimbursement rates and disallowances on physician willingness to care for nursing home patients.

One congressionally mandated study nearing completion has been examining the impact of Medicare and Medicaid policies on the willingness of facilities to participate in both programs. Results found that Medicare's very limited coverage, in addition to its administrative and reimbursement policies, discourages facilities' participation in this program. Medicaid participation is important to nursing homes because of the broader, longer term benefits most States offer. The final research report from this project will be sent to Congress.

On a broader, system-wide level, HCFA research is investigating the impact of State discretionary policies, before and after possible budget reductions, on long term care. This research is designed to answer the following questions:

- o How have various States' discretionary policy choices affected the availability and utilization of long term care services by the aged?

- o How have various States' discretionary policy choices affected the total cost and distribution of Federal, State, and local expenditures for long term care services for the aged?

2. Determinants of Demand for Long Term Care

Individuals with chronic, disabling conditions are likely to require long term informal and/or formal assistance. In order to gain basic information about major diseases and disabling conditions which increase demand for long term care, HCFA is funding research which will develop a model of the natural history of some important chronic diseases. Questions to be answered in this research include:

- o What will be the future incidence and prevalence of these chronic diseases?

- What health care (particularly long term care) costs can be predicted for the treatment of these chronic diseases in future years?

Results from this research will be available throughout this project which concludes in 1984.

Another very important factor affecting the demand for various long term care services is the availability of an informal support system (i.e., family, friends, etc.) for the functionally disabled. Most long term care support is now provided by this informal system. Research in this area is designed to answer the following types of questions:

- What formal and informal supports are the functionally disabled elderly now receiving which serve to delay or prevent institutionalization?

- What factors strengthen or weaken the informal support system?

- What public policies could enhance the family's capability to care for the functionally disabled in the home?

- Will the expansion of formal home health care add to or substitute for family participation in care-giving?

Past research has indicated that the demand for institutional long term care may be due partly to consumers' lack of knowledge about the availability of noninstitutional long term care, and funding available to pay for this care. For this reason, a study is being made of an innovative nursing home preadmission screening program which recommended specific community services instead of institutional care for some individuals referred for institutionalization. Some of the questions to be answered in this research are:

- Did the community referrals serve to substantially delay or avoid subsequent institutionalization?

- What types of individuals were able to be treated in the community rather than in an institution?

- What formal and informal care seemed most effective in preventing institutionalization?

- How do the costs of care compare for similar patients treated in the community vs. the nursing home?

3. Long Term Care Survey of Functionally Limited Individuals in Private Households

This survey will provide a nationally representative LTC data base that is necessary for future planning and policymaking in a nation becoming increasingly more elderly. This survey will supplement the Department's Channeling Demonstration Program in order that projections of costs and the feasibility of national programs can be made at the end of the demonstration period. This survey may be "piggybacked" on the National Health Insurance Survey (NHIS) to screen for functionally limited persons with a supplemental sample obtained by screening a list from the Medicare files. Data will be collected by the Bureau of the Census. Results from the LTC survey will be available on a flow basis including data from the NHIS.

HCFA also conducts demonstrations in long term care for the growing numbers of the elderly, disabled and chronically ill. In FY 81, this program area encompassed studies of the populations in need of care, the factors affecting choice on different kinds of care, the effects of changes in public funding of services outside institutions, the economics of the long term care industry, and methods to reimburse nursing homes prospectively. HCFA also funded demonstrations of community systems that help elderly clients obtain services, and monitor the appropriateness of services.

In FY 81, HCFA published the final report of the evaluation of demonstrations of Medicare reimbursement for SNF care provided in hospital swing beds. Legislation establishing a Medicare swing bed program for small rural hospitals was subsequently enacted.

In FY 80, the Department of Health and Human Services selected 12 States to conduct Channeling demonstrations under the National Long Term Care Demonstration Program. The Channeling Demonstration Program is an intradepartmental effort which includes the close cooperation of HCFA, the Administration on Aging, the Public Health Service, and the Office of the Assistant Secretary for Planning and Evaluation which has been designated the lead agency in the effort.

During FY 81, operational plans were developed to implement the demonstration to test the effect of comprehensive assessment and case management on reducing nursing home and other institutional placement, controlling long term care costs and improving client outcomes. These demonstrations will investigate two channeling models: 1) a single entry community-based system of case management and assessment using existing health and social services; and 2) a single entry community-based system of case management and assessment with an expanded array of services to be reimbursed by the Medicare and Medicaid programs. During FY 81, operational plans were developed to implement this demonstration.

On October 1, 1980, HCFA implemented a two-year Medicare/Medicaid Hospice Demonstration project to gather data on the cost, use, and quality of care provided by hospice organizations to the terminally ill and their families. This project was developed to help define the scope of Federal involvement in the growing hospice movement. The 26 hospices selected to participate in this study are being reimbursed for a number of items and services not currently covered by Medicare and Medicaid. Examples include: outpatient prescription drugs (currently covered by Medicaid), institutional respite and home respite services (primary care giver relief), visits by dieticians and homemakers, supportive and counseling visits to hospice patients during occasional hospital stays, continuous care (by nurses, home health aides, or homemakers) on a shift basis in the home, certain self-help devices, inpatient hospice care, and bereavement services to family members.

The project evalutation is being jointly supported by HCFA, the Robert Wood Johnson Foundation, and the John A. Hartford Foundation. HCFA has contracted with Brown University to conduct an independent study of the project to determine: (1) the cost of care in the last six months of life in a hospice setting versus a conventional care setting, (2) the impact of hospice care on the quality of life of terminal patients and their families as compared to conventional or customary care, (3) the likely cost or cost savings of a Medicare/Medicaid policy of covering hospice care, and (4) the effect of reimbursement on beneficiary demand and hospice care costs.

7. Physician Reimbursement

HCFA regularly analyzes and publishes information on expenditures and reimbursement for physician services by source of financing. The September 1981 Health Care Financing Review reported that total spending for physician services rose from $14.3 billion in calendar year 1970 to $46.8 billion in 1980, a 12.6 percent average annual rate of increase. Of these amounts:

- Medicare spent $1.6 billion in calendar year 1970 (11.3 percent of total physician expenditures), increasing to $7.8 billion in 1980 (16.6 percent of total expenditures for physicians).

- Medicaid spending for physician services increased from $0.7 billion in calendar 1970 (4.8 percent of total spending for physician care) to $2.5 billion in 1980, or 5.3 percent of total spending for physician services. Such spending in 1979 amounted to $2.2 billion, or 5.4 percent of total spending on physician services.

Together, Medicare and Medicaid provided more than one-fifth of all spending for physician services in 1980.

Price inflation contributes most to increasing total physician expenditures. From 1970 to 1980, the relative contribution of the different causes for these increases were identified:

- Overall price inflation -- 56 percent

- Physician fees in excess of general price inflation -- 10 percent

- Increase in population -- 9 percent

- Physician visits per capita -- 5 percent

- Net service intensity per physician visit -- 18 percent

HCFA supports both extramural research and internal studies in physician reimbursement. One such internal study appeared in the September 1981 Health Care Financing Review, entitled "An Analysis of Services Received Under Medicare by Specialty of Physician." This study showed that while the average number of services per reimbursed user under Medicare declined from 21.9 in 1975 to 20.7 in 1977, the number of services provided by general and family practitioners and internists were still higher than those provided in the other specialties. Average reimbursed services per aged enrolled under Medicare increased from 10.78 to 10.83. Average submitted charges showed a marked variation among specialties with an overall average charge of $24.06 per service. Average charges for services provided by orthopedic surgeons, ophthalmologists and general surgeons, $68.90, $64.87 and $51.61, respectively, were significantly higher, compared with charges by general and family practitioners and internists whose average charges per service amounted to $13.25, $12.79 and $17.92, respectively. An analysis of the ratios of regional to national supplies of non-Federal physicians per 100,000 Medicare enrollees showed physicians to be in greater supply in the Northeast (1.18) and the West (1.27) compared with the north central region (0.84) and the South (0.86).

An external study presented in the Spring 1981 issue of the Health Care Financing Review examined physician participation in two Blue Shield plans. Conclusions from that study show a weak link between physician participation and physician quality as measured by board certification, graduation from a U.S. medical school, and high charge levels. Another finding from this study showed that allowance levels exert a moderate to strong influence on participation. The authors also state that the only significant policy tool available for increasing physician acceptance of participation agreements is to increase allowance levels. In addition, the authors posit that the costs of increasing physicians' allowances may offset the savings due to the existence of the implied controls resulting from the assignment option. There were also indications that Blue Shield participation rates were adversely affected when physicians' income opportunities in the Medicare program are raised. Conversely, the authors believed that Medicare and Medicaid participation can be affected as a consequence of changes in Blue Shield's and other commercial carriers' reimbursement practices and policies as well.

The Medicare assignment option has been and continues to be an issue of much concern and discussion. The physician's decision of whether or not to accept assignment is similar in many ways to the Blue Shield participation decision. Recent studies of physician practice patterns and characteristics have uncovered some interesting findings. One recent study investigated "Physicians Behavior Under the Medicare Assignment Option." Some of the key findings from their analyses include: (1) a 10 percent increase in the prevailing charge should raise assignment by 14.7 percent. (2) General practitioners were least willing to accept assignment (32 percent never do), while 78.9 percent of the general surgeons

surveyed take at least some claims on assignment and 29.5 percent accept assignment on all claims. The authors reasoned that the high rate among surgeons could be attributed to their preference for certainty of payment associated with acceptance of assignment. (3) 78.4 percent of board-certified physicians accept assignment compared with only 68.7 percent for the noncredentialed physicians. In addition, physicians with academic appointments were more likely to accept assignment (29.3 percent versus 15.3 percent without academic credentials). (4) The association between Medicaid participation and acceptance of assignment was also explored. While three-fourths of physicians participating in Medicaid accept assignment at least some of the time, about half of physicians not participating in Medicaid never accept assignment. Denial and claims investigation rates were found to have a negative and significant impact on assignment rates. (5) Higher physician income is associated with a negative impact on assignment: assignment rates are 13.6 percent lower among physicians whose incomes are 10 or more percent above the average. (6) The study also found that political attitude played an important role in the assignment decision. The more conservative a physician, the lower the assignment rate -- 6.3 percent of total case load for "conservative" physicians compared with 11.8 percent for those with a "liberal" outlook.

Another study examined the extent to which the supply of surgeons influenced surgery rates, fees and total expenditures for surgery. The researchers found that holding constant all other factors, including prices, the supply of surgeons was found to induce, or shift, demand: a 10 percent increase in supply led to a 1 percent increase in total surgery, and a 1.3 percent increase in elective surgery. All of the inducement appears to take place with discretionary operations: non-elective procedures were not significantly affected by surgeon availability. The estimated utilization equations also reveal that the alternative result of inducement -- if, for some reason, utilization rates remained unchanged -- would be seen in an increase in physician fees. In this case, the short-run effect of a 10 percent increase in the number of surgeons would be an average increase in fees of $50 per operation.

In September 1981, a grant was awarded to the New York State Department of Social Services to conduct a four-year physician reimbursement demonstration in Suffolk County, New York. The purpose of the demonstration is to determine the effects of three different methods of paying physicians for providing services to children under the Medicaid program. The first method is the current fee-for-service reimbursement plan. The second involves paying fee-for-service at Medicare rates for those physicians who are assigned additional continuing care responsibilities as the patient's sole provider of primary care. The third method is a capitation approach.

Two contracts were awarded in 1981 to examine special aspects of physician reimbursement methodology development. Health Economics Research is undertaking a two-year study concerning the potential methods for packaging physician services for reporting and reimbursement. The Urban Institute is conducting a two-year study on alternative methods for developing relative value scales for physician services. It is expected that both studies will provide the basis for developing alternative methods for reimbursing for physician services that will be suitable for experimental testing and development.

8. Program Evaluation

During FY 81, ORDS was responsible for assessing the effectiveness of specific national programs or policies. Major evaluations are mandated by Congress, initiated by the Secretary, or determined by administrative initiative. The Office of Research and Demonstrations is currently responsible for three congressionally mandated studies: (1) the Hospital Providers of Extended Care Services (Rural Swing-bed) Evaluation; (2) the Voluntary Certification of Medicare Supplemental Health Insurance Policies (Medigap certification/penalties) Evaluation; and (3) ESRD evaluative studies. Administrative initiatives are in progress for estimation of inappropriate hospital utilization and work is underway on the analyses of the National Medical Care Utilization and Expenditure Survey (NMCUES). In addition, PSRO evaluation findings have been used to assist program managers in the ranking of PSROs which is required as part of the defunding process.

Swing-Bed

A one-time impact report to Congress is required on the swing-bed program. This study will include analyses of the extent and effect of the agreements under the program on availability, and effective and economical provision of long term care services within the small rural hospital setting as compared to alternative settings. It will address whether such programs are cost effective and whether eligibility to participate in the swing-bed program should be extended to other hospitals, regardless of bed size or geographic location, when there is a shortage of long term care beds. It will incorporate the results of any urban demonstration projects conducted. Findings consistent with the demonstration experience would validate expectations that the swing-bed program will benefit rural communities in meeting both long term care and acute care needs. Such findings would also confirm that rural swing beds are a cost effective means of providing long term care.

Medigap

ORD recently funded a congressionally mandated study of the possible "Medigap" problem. The purpose of this study is to ascertain the effectiveness of State insurance regulations, permitting more informed choice, reducing duplicative coverage, and limiting marketing abuses. A survey of Medicare beneficiaries and of insurance companies is being conducted in six States: California, Florida, Mississippi, New Jersey, Washington, and Wisconsin.

The Medigap legislation further requires ongoing evaluations of the effect of the certification and criminal penalties provisions. A descriptive report on the Medigap certification process is included in Chapter II of this report. Subsequent biennial Medigap evaluation reports will include analyses of the impact of the program and penalties on the type, market share, value, and cost to individuals entitled to benefits of Medigap policies certified by the Secretary.

End-Stage Renal Disease

ORD is sponsoring three studies in response to the congressional mandate of Section 1881(f) of Public Law 95-292.

A survey and analysis of non-Medicare eligible patients, is being conducted as an intramural project to determine the current size of the population of ineligible ESRD patients, their method of treatment, and the financial burden caused by their ineligibility. Part of the study involves the projected cost to the Federal government if Medicare were to extend coverage to this population.

A survey and analysis of independent organ procurement agencies is being conducted to measure their effectiveness in obtaining and distributing kidneys and to study the efficiency of their operations. The study will provide recommendations on how HCFA can improve the yield of transplantable organs and contain costs in the organ procurement system through regulation and reimbursement policy intervention.

An analysis of the impact of financial incentives facing physicians, patients, and dialysis facilities on the total program costs is being conducted as an intramural study. This project links data from the ESRD Management Information System so that variations in modality costs can be made under the two methods of physician reimbursement.

Inappropriate Hospital Utilization

Administrative initiatives are underway that will allow the Secretary to determine the medical necessity for inpatient hospital care and to make regional and national estimates of inappropriate hospital utilization. The Appropriateness Evaluation Protocol (AEP) developed at Boston University is available for use by fiscal intermediaries in any resumption of medical review responsibility. The AEP is a criteria-based technique, demonstrated to be a reliable and valid method for determining appropriateness of hospital use. It is based on objective criteria items related to patient medical services, nursing and life support services, and condition. In addition, it contains a list of reasons for inappropriateness, structured to assist in identifying the causes of unnecessary admissions and days of care. With support from HCFA, the AEP has undergone extensive methodologic testing and has been shown to be a reliable and valid instrument that can be easily and economically applied in chart reviews by utilization review coordinators. (Gertman, P.M., and Restuccia, J.D., "The Appropriateness Evaluation Protocol: A Technique for Assessing Unnecessary Days of Hospital Care," Medical Care, 19:855-871, 1981).

Using this instrument, a study was conducted in 1981 to compare inappropriate hospital use in four regions of the country. The objectives were threefold: 1) to measure the amount of inappropriate (i.e., medically unnecessary) hospital admissions and days of care, 2) to identify the patient, hospital and seasonal factors associated with inappropriate hospital use, and 3) to identify reasons for hospitalization in patients judged to be inappropriately hospitalized. AEP was retrospectively applied by trained nurse reviewers to a sample of 4,800 patient records to assess the appropriateness of hospital admissions and days of care.

Data were collected on Medicare and Medicaid adult medical and surgical hospital patients from 24 hospitals (6 from each region) and 28 calendar dates representing each day of the week in each season of the year. Preliminary results indicate a substantial amount of inappropriateness as well as striking differences among factors in the rates of inappropriateness for both admissions and days of care. Overall, the level of inappropriate admissions is 21 percent and the regional variation ranges from 13 percent to 31 percent. Cases judged to have inappropriate admissions were excluded from analyses of the factors associated with inappropriate days.

The average amount of inappropriate hospital days of care is 20 percent, with the two urban areas having rates of 31 percent and 16 percent and the two rural areas having rates of 14 percent and 19 percent. Overall, medical service patients have a significantly higher rate of inappropriateness than surgical patients. In each region, inappropriate use is dramatically higher near the end of a hospitalization compared to the beginning, (as measured by percentile of the patient's total length of stay regardless of the absolute length of stay). The effects of patient age, sex, length of stay and type of hospital, however, are variable between regions. Day of the week and season effects are insignifcant. The major reason cited for an inappropriate day occuring among patients still requiring hospitalization is the delay in performance of a diagnostic test or non-operative procedure. For patients who do not require hospitalization, the major reason for inappropriateness is conservative medical management.

These results provide preliminary evidence that total hospital use rates vary with rates of inappropriate use and indicate areas in which efforts to reduce inappropriate use are most likely to achieve successful results. Regional estimates of inappropriate utilization will be made available to the Secretary.

National Medical Care Utilization and Expenditure Survey (NMCUES)

In 1980, HCFA and the National Center for Health Statistics co-sponsored the National Medical Care Utilization and Expenditure Survey (NMCUES). This survey, which completed its field interview phase in early 1981, obtained person-based data on the patterns of use of health services and the costs and sources of payment of these services for noninstitutionalized persons with particular focus on Medicare and Medicaid beneficiaries. The first six months of data are now available and various preliminary analyses are in progress. The NMCUES information is expected to be especially useful in evaluating the Medicare/Medicaid interface and "crossover eligibles." A large proportion of Medicaid enrollees are also enrolled in Medicare. In these cases, Medicare is the primary or first payor of medical claims. The NMCUES data will provide the first opportunity to evaluate cost sharing or cost shifting of such "crossover eligibles."

NMCUES data reflect a year-long record of the use of health care services together with information on factors that affect the use of such services: disabling conditions, functional limitations, work history, income, access to medical resources, insurance coverage, and family structure - among many others. The tabulation of the data is proceeding on schedule. Reports of preliminary findings have been presented in

public forums and are being readied for publication. A comprehensive program of publications based on survey data offers promise of making significant contributions to understanding factors that influence the use and costs of covered and non-covered health care services.

Professional Standards Review Organization (PSRO)

Methodology and expertise developed by ORD in previous Professional Standards Review Organization (PSRO) program evaluations along with procedures and operational criteria developed within HCFA were used to rank all 186 PSROs relative to their efficiency and effectiveness. This ranking allowed identification of PSROs which did not meet a minimum level of performance and permitted notification of intent-to-terminate to be sent to 46 organizations.

9. Quality and Effectiveness

HCFA carries out a number of projects to determine whether Medicare beneficiaries receive appropriate, high quality care. During FY 81, HCFA continued to evaluate experimental Medicare second surgical opinion programs in New York and Michigan along with HHS' nationwide second surgical opinion program. New findings from the second surgical opinion programs include the following:

- In the New York and Michigan voluntary programs, only 2 percent of the surgical patients sought second opinions.
- In these two programs, one-third of those seeking second opinions were not confirmed, and the remaining two-thirds were confirmed for appropriateness of the proposed surgery.
- In the New York voluntary program 6 months after getting a second opinion, 56 percent of persons receiving a confirming second opinion and 15 percent of persons receiving a nonconfirming opinion had the surgery.
- The Medicare demonstration second opinion programs at best reduced the amount of surgery among those who participated by about 12 percent.
- Medicare beneficiaries constitute 40 percent of the callers to the National Second Surgical Opinion program.

This study, when completed, will not only determine the cost effectiveness of second opinion programs, but also the factor affecting the use of second opinion benefits, decision making by physicians and patients, and the impact of the programs on surgery rates and the health status of paticipating beneficiaries.

In FY 81, HCFA awarded a contract to evaluate the three Part B fixed price competitive contractor experiments undertaken in Illinois, Maine, and upstate New York. (A full description of the experiments themselves

appears in this report, Chapter II, B, Achieving More Efficient Intermediary and Carrier Performances, Contracting Initiatives.) The evaluation of the experiments has been designed to determine the effects of a competitive fixed price procurement approach on administrative costs and on the quality and timeliness of service to beneficiaries and medical care providers. Findings from the evaluation will be used in assessing the possible role of competitive fixed price contracting in HCFA's contracting strategy. The findings will also be used in judging the usefulness of various components of the process by themselves, or in combination, for further testing or for possible adoption in program operations. The evaluation is scheduled to be completed by the end of FY 82.

Preliminary results from the evaluation of the Oklahoma Utilization Review System (OURS) were reported to HCFA in FY 81. The OURS demonstration used profiles of claims data to determine hospital exemptions from Federally mandated concurrent utilization review requirements. Although OURS was no more effective than the comparison PSRO in controlling aggregate hospital use, it was found to be a feasible and less costly approach to utilization review. Most hospitals that failed the profile criteria and faced withdrawal of the exemption from concurrent review quickly restored performance to acceptable levels.

Other studies in this program area assessed the outcomes and appropriateness of use of intensive care services, and continued to develop methods to identify inappropriate use of hospital and nursing home care. Other efforts are ongoing to develop models and methods of discovering fraud and abuse.

Data Base and Statistical Activities

The central administration of the Medicare program at the Federal level has permitted the development of a uniform multipurpose data base that serves the needs of planners, researchers and policymakers. HCFA uses this claims-based statistical system, together with other reporting systems, to prepare a wide variety of statistical and analytical reports and studies on the utilization and reimbursement of health care services financed by Medicare.

Regular statistical reports and notes are issued describing the use of and the expenditures for the following Medicare benefits: short- and long-stay hospital services, skilled nursing facility services, home health agency services, and hospital outpatient services. A new series which upgrades the scope of data available on physician services is about to be initiated. In addition to these reports, which emphasize the patterns and trends in the use of Medicare benefits, access and equity in their distribution among beneficiary groups, and the degree to which these services are provided efficiently and economically, HCFA produces Medicare statistical reports that provide data on number and demographic characteristics of aged, disabled and ESRD beneficiaries, as well as on characteristics of participating providers and amounts of Medicare benefit payments at State and county levels. A summary report is also published presenting person-based data showing expenditures and utilization by type of benefit, age, sex, and beneficiary residence.

A new data base that was fully implemented in FY 80 is derived from the Medicare statistical system. Through linkage of Medicare eligibility and claims files, a continuous history sample of five percent of all Medicare beneficiaries will trace their use of Medicare benefits from 1974 on (or time of enrollment, if later). This will allow longitudinal studies of benefit utilization, expenditures, and analyses of hypothetical changes in benefit structure or cost-sharing arrangements.

In addition to reports on HCFA programs, ORDS maintained a data base on national health spending by sector of care, and by source of payment. The September 1981 issue of the Health Care Financing Review reported trends in spending and sources of payment through calendar year 1980. The article reported that national health care spending reached $247 billion in 1980, up 15.2 percent from 1979, and comprised 9.4 percent of the Gross National Product. Medicare and Medicaid provided $61 billion, or a quarter of total health spending. These estimates were updated along with other statistics on hospital costs, health care prices and employment and national economic indicators in HCFA's quarterly issues of TRENDS. TRENDS reported that National Health Expenditures rose to $256 billion annually by the year ending March 1981, up nearly 15 percent over the same period in the prior year.

Projections of national health spending by sector and by source of payment through 1990 appeared in the Winter 1981 issue of the Health Care Financing Review. The article projected that National Health Expenditures would reach $821 billion in 1990, or 10.8 percent of the Gross National Product, primarily due to increased spending for hospital and nursing home care. The national health expenditure data base also includes distribution of health spending and sources of payment by age group, with special emphasis on persons age 65 and older, which was used for an article in the Health Care Financing Review of Spring 1980. The article reported that persons aged 65 and over comprised only 11 percent of all personal health care spending. Medicare and Medicaid paid about 58 percent of all personal health care expenses of aged persons in 1978.

In addition to reports based on the Medicare claims payment system, HCFA produces reports based on field interview survey of a sample of Medicare enrollees. In 1981, HCFA produced a report, Medicare: Use of Prescription Drugs by Aged Persons Enrolled for Supplementary Medical Insurance, 1967-1977, which was based on the Current Medicare Survey (CMS). The CMS was terminated after the 1977 survey year.

HCFA Research Publications Program

Under the guidelines of the current moratorium on government publications, HCFA continued its research publications program in FY 81. By developing eight coordinated, color-keyed series of publications covering research, demonstration and statistics, HCFA has attempted to meet the challenges of effective dissemination and use of its research and statistics.

HCFA published the following series applicable to Medicare:

- Health Care Financing Review is a quarterly research journal, which often carries articles relating to Medicare.
- Health Care Financing Grants and Contracts Reports present the final reports from selected ORD/HCFA-funded extramural projects of the kind described in this chapter.
- Health Care Financing Research Reports present the results of major studies and projects conducted by HCFA program staff. "Ten Years of Short-Stay Hospital Utilization and Costs Under Medicare: 1967-1976" is a typical research report.
- Health Care Financing Program Statistics contain detailed data and analyses on the Medicare program. Included in this series are Medicare data on enrollment, providers and use of and reimbursement for covered services.
- Health Care Financing Notes provide descriptive data on the Medicare program in a brief format as soon as they become available.
- Health Care Financing Issues examine topics of special interest from a policy standpoint. This series began in FY 81 with publications of "HMOs: Issues and Alternatives for Medicare and Medicaid."

In addition, the following series are published by HCFA:

- Health Care Financing Trends is a quarterly update of selected national health statistics.
- Health Care Financing Monographs include publications which do not fit into any of the other series. Examples include the Grants Brochure, various conference proceedings, and "Research and Demonstrations in Health Care Financing," which briefly describes all ongoing projects.

Copies of these publications and additional information are available from ORD Publications, Room 2-E-6 Oak Meadows Building, 6325 Security Boulevard, Baltimore, Maryland 21207.

APPENDIX A

Part A Intermediaries and Part A Blue Cross Plans

PART A - INTERMEDIARIES

Blue Cross Association
676 North St. Clair Street
Chicago, IL 60611

Aetna Life Insurance Company
151 Farmington Avenue
Hartford, CT 06156

Cooperative de Seguros
de Vida Puerto Rico
Post Office Box 3428 G.P.O.
San Juan, PR 00936

Hawaii Medical Service Association
1504 Kapiolani Boulevard
Post Office Box 860
Honolulu, HI 96808

Kaiser Foundation Health Plan, Inc.
1956 Webster Street
Room 310-A
Oakland, CA 94612

Mutual of Omaha Insurance Company
Post Office Box 456
Downtown Station
Omaha, NE 68101

Nationwide Mutual Insurance Company
Post Office Box 1625
Columbus, OH 43216

The Prudential Insurance Company
of America
Drawer 471
Millville, NJ 08332

The Travelers Insurance Company
One Tower Square
Hartford, CT 06115

PART A - BLUE CROSS PLANS

Blue Cross and Blue Shield
of Alabama
450 Riverchase Parkway East
Birmingham, AL 35298

Blue Cross and Blue Shield
of Arizona, Inc.
321 West Indian School Road
Post Office Box 13466
Phoenix, AZ 85002

Arkansas Blue Cross and Blue
Shield, Inc.
601 Gaines Street
Little Rock, AR 72203

Blue Cross of Southern California
Post Office Box 70000
Van Nuys, CA 91470

Blue Cross of Northern California
1950 Franklin Street
Oakland, CA 94659

Blue Cross and Blue Shield
of Colorado
700 Broadway
Denver, CO 80273

Blue Cross and Blue Shield
of Connecticut, Inc.
370 Bassett Road
North Haven, CT 06473

Blue Cross and Blue Shield
of Delaware, Inc.
201 West 14th Street
Wilmington, DE 19899

Group Hospitalization, Inc.
550 12th Street, SW
Washington, DC 20024

Blue Cross of Florida, Inc.
Post Office Box 1798
Jacksonville, FL 32201

Blue Cross and Blue Shield
of Georgia/Atlanta, Inc.
3348 Peachtree Road, NE
Post Office Box 4445
Atlanta, GA 30302

Blue Cross of Georgia/Columbus, Inc.
2357 Warm Springs Road
Post Office Box 7368
Columbus, GA 31908

Blue Cross of Idaho Health
Service, Inc.
1501 Federal Way
Post Office Box 7408
Boise, ID 83707

Health Care Service Corporation
233 North Michigan Avenue
Chicago, IL 60601

Mutual Hospital Insurance, Inc.
120 West Market Street
Indianapolis, IN 46204

Blue Cross of Iowa
Ruan Building
636 Grand Avenue
Des Moines, IA 50307

Blue Cross of Western Iowa
and South Dakota
Third and Pierce Streets
Sioux City, IA 51102

Blue Cross of Kansas, Inc.
1133 Topeka Boulevard
Post Office Box 239
Topeka, KS 66601

Blue Cross and Blue Shield
of Kentucky, Inc.
9901 Linn Station Road
Louisville, KY 40223

Louisiana Health Service
and Indemnity Company
Post Office Box 15699
Baton Rouge, LA 70895

Associated Hospital Service
of Maine
110 Free Street
Portland, ME 04101

Blue Cross of Maryland, Inc.
700 East Joppa Road
Towson, MD 21204

Blue Cross of Massachusetts, Inc.
100 Summer Street
Boston, MA 02106

Blue Cross and Blue Shield
of Michigan
600 Lafayette East
Detroit, MI 48226

Blue Cross and Blue Shield
of Minnesota
3535 Blue Cross Road
St. Paul, MN 55765

Blue Cross and Blue Shield
of Mississippi, Inc.
Post Office Box 1043
Jackson, MS 39205

Blue Cross Hospital Service, Inc.
of Missouri
4444 Forest Park
St. Louis, MO 63108

Blue Cross of Montana
3360 10th Avenue, South
Post Office Box 5017
Great Falls, MT 59403

Blue Cross and Blue Shield
of Nebraska
Post Office Box 3248
Main Post Office Station
Omaha, NE 68103

New Hampshire-Vermont Health
Service
Two Pillsbury Street
Concord, NH 03306

Hospital Service Plan
of New Jersey
33 Washington Street
Newark, NJ 07102

New Mexico Blue Cross
and Blue Shield, Inc.
12800 Indiana School Road, NE
Albuquerque, NM 87112

Blue Cross and Blue Shield
of Greater New York
622 Third Street
New York, NY 10017

Blue Cross and Blue Shield
of North Carolina
Post Office Box 2291
Durham, NC 27702

Blue Cross of North Dakota
4510 13th Avenue, SW
Fargo, ND 58121

Hospital Care Corporation
1351 William Howard Taft Road
Cincinnati, OH 45206

Blue Cross of Northeast Ohio
2066 East Ninth Street
Cleveland, OH 44115

Blue Cross of Central Ohio
255 East Main
Post Office Box 16526
Columbus, OH 43216

Blue Cross of Northwest Ohio
Post Office Box 943
Toledo, OH 43656

Blue Cross and Blue Shield
of Oklahoma
1215 South Boulder Avenue
Tulsa, OK 74119

Northwest Hospital Service
100 SW Market Street
Post Office Box 1217
Portland, OR 97201

Hospital Service Plan
of the Lehigh Valley
1221 Hamilton Street
Allentown, PA 18102

Capital Blue Cross
100 Pine Street
Harrisburg, PA 17101

Blue Cross of Greater Philadelphia
1333 Chestnut Street
Philadelphia, PA 19107

Blue Cross of Western Pennsylvania
One Smithfield Street
Pittsburgh, PA 15222

Hospital Service Association
of Northeastern Pennsylvania
Blue Cross Building
70 North Main Street
Wilkes-Barre, PA 18711

Blue Cross of Rhode Island
444 Westminster Mall
Providence, RI 02901

Blue Cross and Blue Shield
of South Carolina
Drawer F, Forest Acres Branch
Columbia, SC 29260

Blue Cross and Blue Shield
of Tennessee
Blue Cross Building
Chattanooga, TN 37402

Group Hospital Service, Inc.
Post Office Box 222146
Dallas, TX 75222

Blue Cross of Utah
2455 Parleys Way
Post Office Box 30270
Salt Lake City, UT 84125

Blue Cross of Virginia
2015 Staples Mill Road
Post Office Box 27401
Richmond, VA 23279

Blue Cross of Southwestern
Virginia
Post Office Box 13047
3959 Electric Road
Roanoke, VA 24045

Blue Cross of Washington
and Alaska, Inc.
15700 Dayton Avenue, North
Post Office Box 327
Seattle, WA 98111

Blue Cross Hospital Service, Inc.
Post Office Box 1353
Commerce Square
Charleston, WV 25325

Parkersburg Hospital Service, Inc.
Post Office Box 1948
Parkersburg, WV 26101

West Virginia Hospital Service, Inc.
20th and Chapline Street
Wheeling, WV 26003

Associated Hospital Service, Inc.
401 West Michigan Street
Post Office Box 2025
Milwaukee, WI 53203

Blue Cross Blue Shield
of Wyoming
4000 House Avenue
Post Office Box 2266
Cheyenne, WY 82001

APPENDIX B

Part B - Blue Shield Plans

Part B - Commercials, Other

PART B - BLUE SHIELD PLANS

Blue Cross and Blue Shield
of Alabama
450 Riverchase Parkway, East
Birmingham, AL 35298

Arkansas Blue Cross and
Blue Shield, Inc.
601 Gaines Street
Little Rock, AK 72203

California Physicians Service
2 Northpoint Street
Post Office Box 7968-Rincon Annex
San Francisco, CA 94120

Blue Cross and Blue Shield
of Colorado
700 Broadway
Denver, CO 80273

Blue Shield of Florida, Inc.
Post Office Box 1798
Jacksonville, FL 32231

Mutual Medical Insurance, Inc.
120 West Market Street
Indianapolis, IN 46204

Blue Shield of Iowa
Ruan Building
636 Grand Avenue
Des Moines, IA 50307

Blue Shield of Kansas, Inc.
1133 Topeka Boulevard
Post Office Box 239
Topeka, KS 66601

Blue Shield of Maryland, Inc.
700 East Joppa Road
Towson, MD 21204

Blue Shield of Massachusetts, Inc.
100 Summer Street
Boston, MA 02106

Blue Cross and Blue Shield
of Michigan
600 Lafayette East
Detroit, MI 48226

Blue Shield of Kansas City
Post Office Box 169
Kansas City, MO 64141

Montana Physicians Service
404 Fuller Avenue
Post Office Box 4310
Helena, MT 59601

New Hampshire-Vermont Health
Service
Two Pillsbury Street
Concord, NH 03306

Blue Shield of Western
New York, Inc.
15 Chenango Street
Binghamton, NY 13901

Blue Cross and Blue Shield
of Greater New York
622 Third Avenue
New York, NY 10017

Blue Shield of North Dakota
4510 13th Avenue, SW
Fargo, ND 58121

Pennsylvania Blue Shield
Post Office Box 65
Camp Hill, PA 17011

Seguros de Servicio de Salud
de Puerto Rico, Inc.
Post Office Box 3628 G.P.O.
San Juan, PR 00936

Blue Shield of Rhode Island
444 Westminster Mall
Providence, RI 02901

Blue Cross and Blue Shield
of South Carolina
Drawer F, Forest Acres Branch
Columbia, SC 29219

Group Medical and Surgical Service
Post Office Box 222147
Dallas, TX 75222

Blue Shield of Utah
2455 Parleys Way
Post Office Box 30270
Salt Lake City, UT 84125

Washington Physicians Service
2401 4th Avenue
4th and Battery Building,
6th Floor
Seattle, WA 98121

Wisconsin Physicians Service
Insurance Corporation
Post Office Box 9277
Madison, WI 53715

PART B - COMMERCIALS, OTHER

Aetna Life Insurance Company
151 Farmington Avenue
Hartford, CT 06156

Connecticut General Life
Insurance Company
900 Cottage Grove Road
Hartford, CT 06152

E.D.S. Federal Corporation
7171 Forest Lane
Dallas, TX 75230

The Equitable Life Assurance
Society of the United States
1285 Avenue of the Americas
New York, NY 10019

General American Life Insurance
Company
Post Office Box 505
St. Louis County, MO 63166

Group Health Incorporated
326 West 42nd Street
New York, NY 10036

Metropolitan Life Insurance Company
One Madison Avenue
New York, NY 10010

Mutual of Omaha Insurance
Company
Post Office Box 456
Downtown Station
Omaha, NE 68101

Nationwide Mutual Insurance
Company
Post Office Box 1625
Columbus, OH 43216

Transamerica Occidental Life
Insurance Company
Post Office Box 54905,
Terminal Annex
12th at Hill Street
Los Angeles, CA 90054

Pan-American Life Insurance
Company
Post Office Box 60450
New Orleans, LA 70160

The Prudential Insurance
Company of America
Drawer 471
Millville, NJ 08332

The Travelers Insurance Company
One Tower Square
Hartford, CT 06115

State Agency

Department of Human Services
Post Office Box 25352,
State Capitol Station
Oklahoma City, OK 73125

APPENDIX C

Program Data by State of Residence:

State of Residence	Beneficiaries (1/1/81)[1] Hospital Insurance	Beneficiaries (1/1/81)[1] Medical Insurance	Benefit Payments (FY 81) Hospital Insurance	Benefit Payments (FY 81) Medical Insurance
			(in millions)	
Total, All Areas[2]	28,363,175	27,641,902	$28,907[3]	$12,345[3]
Alabama	484,757	481,582	451	177
Alaska	13,049	11,161	16	7
Arizona	331,053	322,527	318	173
Arkansas	344,795	341,468	269	132
California	2,608,236	2,589,851	3,273	1,723
Colorado	267,963	262,029	252	105
Connecticut	394,243	389,381	401	181
Delaware	66,844	65,422	63	30
District of Columbia	74,100	71,852	116	50
Florida	1,714,485	1,704,595	1,738	968
Georgia	580,478	578,757	477	237
Hawaii	81,474	79,933	72	41
Idaho	105,193	102,442	81	33
Illinois	1,345,992	1,327,183	1,736	566
Indiana	646,148	632,494	669	222
Iowa	416,701	411,166	388	114
Kansas	325,791	320,876	348	127
Kentucky	457,717	455,082	392	133
Louisiana	441,942	418,290	395	150
Maine	158,200	156,344	154	55
Maryland	420,735	409,315	519	203
Massachusetts	774,106	761,493	978	390
Michigan	1,037,518	1,023,133	1,248	554
Minnesota	514,855	508,597	505	182
Mississippi	319,398	318,016	259	104
Missouri	703,273	690,924	736	249
Montana	94,814	92,887	81	34
Nebraska	219,353	215,587	200	65
Nevada	74,924	72,909	102	47
New Hampshire	113,328	110,611	109	40
New Jersey	940,670	933,310	962	470
New Mexico	128,702	126,270	106	54
New York	2,334,284	2,307,505	2,601	1,197
North Carolina	679,272	673,070	539	229
North Dakota	87,350	85,730	90	33

Program Data by State of Residence: (continued)

State of Residence	Beneficiaries (1/1/81) 1/ Hospital Insurance	Medical Insurance	Benefit Payments (FY 81) Hospital Insurance	Medical Insurance
			(in millions)	
Ohio	1,297,867	1,274,946	$1,393	$489
Oklahoma	397,467	391,918	354	131
Oregon	334,887	322,443	342	132
Pennsylvania	1,681,227	1,653,024	1,862	748
Rhode Island	137,971	135,737	150	64
South Carolina	327,624	323,197	260	107
South Dakota	98,375	96,418	86	29
Tennessee	572,887	570,024	517	185
Texas	1,446,292	1,437,118	1,231	549
Utah	119,104	113,419	90	42
Vermont	64,906	64,080	60	22
Virginia	557,169	542,563	506	215
Washington	472,609	461,364	396	184
West Virginia	273,606	270,370	246	76
Wisconsin	619,668	612,999	631	217
Wyoming	41,165	39,864	36	14
Puerto Rico	356,900	207,923	84	50
Virgin Islands	4,873	4,495	2	1
Other Areas 4/	2,836	2,288	1	1

1/ Represents persons enrolled for coverage, by program, as of January 1, 1981.

2/ Included in All Areas but not shown separately are data for beneficiaries residing in foreign countries and beneficiaries whose State of residence is currently unknown.

3/ Benefit payments for All Areas represent actual trust fund disbursements excluding administrative expenses. Distribution of benefit payments by geographic area was estimated based on interim reimbursements in CY 1981 as reflected on bills recorded in central office. Payments reflect residence of beneficiary. Benefit payments are shown in millions of dollars. Detail may not seem to total due to rounding.

4/ Other Areas includes data for Guam, American Samoa, and other outlying areas.

APPENDIX D
Five-Year Trend Analysis of Contractor Administrative Costs and Productivity Improvements

PART A INTERMEDIARIES

FY 1977 Through FY 1981

The following tables contain significant workload, administrative cost, average manpower, and benefit payment data reflecting the combined performance of all Part A intermediaries from Fiscal Year 1977 through 1981.

During this period, the annual workloads rose a total of 32.4 percent over the base while total administrative costs rose only 28.6 percent. In terms of total unit cost, the decrease from $5.68 to $5.52 is 2.9 percent. These decreased costs reflect the expanded use of automatic data processing equipment, improved procedures, and the implementation of fixed price contracts.

PART A INTERMEDIARIES

TREND DATA AND INDICES
WORKLOAD AND COST

Fiscal Year	Bills Processed	Total Adm. Cost	Total Unit Cost	Adm. Cost	Unit Cost Exc. Audit	Provider Audit and Reimbursement
1977	32,119,000	$182,331,000	$5.68	$146,848,500	$4.57	$44,146,800
1978	34,862,400	$191,259,600	$5.49	$141,824,000	$4.07	$47,695,400
1979	36,410,000	$201,546,200	$5.54	$147,411,000	$4.05	$51,980,900
1980	39,789,300	$216,037,000	$5.43	$155,131,500	$3.90	$60,905,500
1981	42,539,800	$234,615,400	$5.52	$166,190,200	$3.91	$68,425,300
		INDICES (FY 1977 AS 100 PERCENT)				
1977	100.0	100.0	100.0	100.0	100.0	100.0
1978	108.5	104.8	96.6	96.5	89.0	108.0
1979	113.3	110.5	97.5	100.3	88.6	117.7
1980	123.8	118.4	95.5	105.6	85.3	137.9
1981	132.4	128.6	97.1	113.1	85.5	154.9

PART A INTERMEDIARIES

TREND DATA AND INDICES
PRODUCTIVITY, PERSONAL SERVICE COSTS AND BENEFITS

Fiscal Year	Staff* Years	Production* Per Staff-Year	Avg. P.S* Cost Per Staff-Year	Benefits Paid (M)	Benefits Paid Per Bill	% of Adm. Cost to Bene (Inc. Audit)
1977	7,607.9	4,222	$13,474	$15,846,400	$493.37	1.2
1978	6,895.1	5,056	$14,415	$18,405,100	$527.93	1.0
1979	6,681.0	5,450	$15,623	$20,931,400	$574.88	1.0
1980	6,211.6	6,406	$17,121	$25,238,000	$637.49	0.9
1981	5,819.5	6,862	$18,157	$30,567,400	$718.56	0.8
			INDICES (FY 1977 AS 100 PERCENT)			
1977	100.0	100.0	100.0	100.0	100.0	100.0
1978	90.6	119.8	107.0	116.1	107.0	83.3
1979	87.8	129.1	115.9	132.1	116.5	83.3
1980	81.6	151.7	127.1	159.3	129.2	75.0
1981	76.5	162.5	134.8	192.9	145.6	66.7

* FY 1977 data excludes Provider Audit, PSRO and HMO activities.
FYs 1978, 1979, 1980, and 1981 data excludes Provider Reimbursement, Provider Audit, PSRO and HMO activities.

PART B CARRIERS

FY 1977 Through FY 1981

The following tables contain significant workload, administrative cost, average manpower, and benefit payment data reflecting the combined performance of all Part B carriers from Fiscal Year 1977 through 1981.

During the period, the annual workloads rose a total of 56.7 percent over the base while total administrative costs rose only 39.6 percent. In terms of unit cost for processing claims, the decrease from $2.98 to $2.66 is 10.8 percent. Contributing to the reduced cost of processing a claim, in addition to expanded use of data processing equipment and improved procedures, are the increased use of facilities management subcontracts and fixed price contracts which reduced the manpower to 91.3 percent of FY 1977 manpower levels.

PART B CARRIERS

TREND DATA AND INDICES
WORKLOAD AND COST

Fiscal Year	Claims Processed	Adm. Cost	Claims Unit Cost	Payment Records Processed	Payment Records Unit Cost
1977	108,126,300	$322,608,800	$2.98	88,983,800	$3.63
1978	120,439,700	$344,572,700	$2.86	100,087,300	$3.43
1979	133,494,900	$375,273,500	$2.81	112,864,600	$3.32
1980	152,312,600	$398,043,300	$2.61	129,465,800	$3.07
1981	169,541,671	$450,537,700	$2.66	146,992,600	$3.07
		INDICES (FY 1977 AS 100 PERCENT)			
1977	100.0	100.0	100.0	100.0	100.0
1978	111.3	106.8	95.9	112.4	94.4
1979	123.4	116.3	94.2	126.8	91.4
1980	140.8	123.3	87.5	145.4	84.5
1981	156.7	139.6	89.2	165.1	84.5

PART B CARRIERS

TREND DATA AND INDICES
PRODUCTIVITY, PERSONAL SERVICE COSTS AND BENEFITS
(EXCLUDING PSRO & HMO)

Fiscal Year	Staff-Years	Production Per Staff-Year	Avg. P.S. Cost Per Staff-Year	Benefits Paid (M)	Benefits Paid Per Claim	% of Adm. Cost Benefits
1977	16,995.8	6,357	$11,777	$4,634,568	$42.86	7.0
1978	16,851.8	7,110	$12,770	$5,436,781	$45.14	6.3
1979	16,474.0	8,103	$13,753	$6,360,068	$47.64	5.9
1980	15,514.9	9,817	$15,172	$7,798,407	$51.20	5.1
1981	15,523.8	10,293	$16,601	$9,534,176	$56.23	4.7

INDICES (FY 1977 AS 100 PERCENT)

1977	100.0	100.0	100.0	100.0	100.0	100.0
1978	99.1	111.8	108.4	117.3	105.3	90.0
1979	96.9	127.4	116.7	137.2	111.1	84.2
1980	91.2	154.4	128.8	168.2	119.4	72.8
1981	91.3	161.9	140.9	205.7	131.1	67.1

APPENDIX E. SIGNIFICANT LEGISLATION ENACTED IN FY 81

P.L.96-473 - Social Security Act - Retirement Test

Enactment date: October 19, 1980

Separate Medicare Application (Amendments to Title II of the Social Security Act)

Present Law

An individual must file for social security cash benefits in order to be entitled to Medicare hospital insurance benefits. This is the case even when an individual will not be eligible for cash benefits because his/her earnings are too high. The way the law is now written, an individual who is still working and filing only to establish entitlement to Medicare could trigger the monthly measure exception to the social security earnings test through an isolated month of limited or no earnings in a year prior to actual retirement. (As amended by the Social Security Amendments of 1977 (P.L. 95-216), the retirement test for social security cash benefits was placed on an annual rather than a monthly measure, except for the first year of retirement; i.e., "grace year.") As a result, when the individual actually retires in some later year, he/she would not be eligible for the monthly test and may therefore be ineligible for cash benefits.

Modification

The new law provides that a person filing to establish entitlement to Medicare hospital insurance benefits will not be required to establish simultaneously his/her entitlement to social security old-age or survivors insurance benefits. People who have already withdrawn their applications for cash and hospital insurance (Part A) benefits (and repaid any cash and Part A benefits received), in order to have the monthly earnings test available in a later year, will be deemed to have filed an application for Part A benefits as of the date the original application for cash and Part A benefits was filed. This allows an individual to have Part A protection and to reserve the cash benefits "grace year" for the year he/she actually retires.

Effective date: January 1, 1981

P.L. 96-499 - Omnibus Budget Reconciliation Act of 1980

Enactment date: December 5, 1980

I. Benefit Expansions

Home Health Services (Section 930)

This provision assures coverage under Medicare of unlimited home health visits; eliminates the 3-day prior-hospitalization requirement for home health services under Part A; eliminates the $60 deductible for home health services under Part B; includes occupational therapy as qualifying criteria for home health benefits; and permits proprietary home health agencies to participate in States not having licensure laws.

Effective date: July 1, 1981

Preadmission Diagnostic Testing (Section 932)

This section provides full reimbursement under Medicare for diagnostic services provided in a hospital's outpatient department and, to the extent practical (as determined by the Secretary), in a physician's office within 7 days prior to the patient's admission as an inpatient.

Effective date: Upon enactment

Outpatient Rehabilitation Facilities (Section 933)

Comprehensive outpatient rehabilitation facilities are recognized as Medicare "providers." Medicare reimbursement is authorized for rehabilitation services provided in a certified outpatient rehabilitation facility.

Effective date: Accounting periods beginning July 1, 1981

Outpatient Physical Therapy (Section 935)

The annual limit is increased from $100 to $500 for outpatient physical therapy services under Medicare.

Effective date: Expenses beginning calendar year 1982

Dental Services (Section 936)

Dental coverage under Medicare is expanded to include inpatient hospital services in connection with dental care where they are warranted by the severity of the noncovered dental procedure, in addition to the circumstances applicable under current law.

Effective date: July 1, 1981

Optometrist Services (Section 937)

This provision provides Medicare coverage of optometrists for services related to the condition of aphakia. Also, it requires the Secretary to submit legislative recommendations to Congress for coverage of optometric services in connection with cataracts and other services authorized under licensure.

Effective date: July 1, 1981

Antigens (Section 938)

This section covers antigens under Medicare when prepared by one physician and forwarded to another for administering to the patient.

Effective date: January 1, 1981

Plantar Warts (Section 939)

Medicare coverage of the treatment of plantar warts is reinstated.

Effective date: July 1, 1981

Enrollment in Part B of Medicare (Section 945)

Permission is granted for Medicare beneficiaries to enroll in Part B at any time, with entitlement beginning on the third calendar month following the month of enrollment. Also, provision is made for unlimited reenrollment in Part B and in Part A for those who purchase that protection.

Effective date: April 1, 1981

Buy-In Agreements (Section 945)

Those States which currently do not have Part B buy-in agreements may enter into such agreements. States that now have buy-in agreements which cover only cash assistance recipients may cover other Medicaid eligibles.

Effective date: During calendar year 1981 only

Payment for Services Furnished to Deceased Beneficiaries (Section 954)

This section provides that persons with a legal obligation to pay a physician's bill for a deceased beneficiary may be reimbursed by Medicare, even for unassigned claims, prior to payment of the bill. The current system requires payment of the physician's bill before Medicare will reimburse for unassigned claims.

Effective date: Claims filed on or after January 1, 1981

Payment Where Beneficiary Not At Fault (Section 956)

The Secretary of HHS is required to make payment under the Medicare hospital insurance program for inpatient hospital or SNF services in those instances where a beneficiary requiring a higher level of care is erroneously placed in a part of the institution providing lower level of care.

Effective date: January 1, 1981

II. Reimbursement Reform

State Cost-Containment Demonstrations (Section 903)

The Secretary of HHS is authorized to grant (or continue) Medicare waivers for State cost-control demonstrations until the State's reimbursement system is no longer applicable to all third-party payors or no longer meets the required tests of effectiveness in controlling costs. The Secretary is required to continue the Medicare reimbursement system in accord with these requirements for any State which has had a cost-containment demonstration project reimbursement system in continuous operation since July 1, 1977. No more than six Statewide demonstration projects could be continued or implemented under this authority.

Effective date: Upon enactment

Coordinated Audits (Section 914)

Coordinated audits under Medicare, Medicaid, and the Maternal and Child Health programs are mandated. The Secretary also is directed to evaluate the feasibility of creating a single coordinated appeals process to adjudicate disputes arising under coordinated audits.

Effective date: Under Medicaid for medical assistance provided on the first day of the calendar quarter beginning 30 days after enactment. Report to Congress is required on actions taken to implement this provision.

Reimbursement of Clinical Laboratories (Section 918)

This provision limits recognition of markup of bills from a physician, for services performed by an independent laboratory, to the lesser of the reasonable charge of the laboratory or the amount charged by the physician, plus a nominal fee for physician handling of the specimen. If the physician's bill does not identify who performed the test or give the amount charged, Medicare payment would be the lowest charge obtainable from a local laboratory. Also, the Secretary would report to the Congress within 24 months on the effect of this provision.

Effective date: Medicare--no later than April 1, 1981

Outpatient Surgery (Section 934)

Provision is made for reimbursement for costs of certain surgical procedures (as determined by the Secretary) performed in ambulatory surgical centers and in a physician's office and for certain expenses associated with such surgery, including recognition of overhead in a physician's office. Such reimbursement would be made for surgery performed in a physician's office only if the physician is authorized to perform the procedures in a nearby hospital and if a PSRO has agreed to conduct review of the physician's performance of such procedures. Physicians would be paid 100 percent of reasonable charges if they accept assignment.

Effective date: Upon enactment

Payment to Providers of Services (Section 942)

Medicare reimbursement is assured to providers under Part B of Medicare on the basis of the reasonable cost of services minus the coinsurance amounts charged beneficiaries for outpatient services. The law inadvertently repeals the "lower of costs or charges" provision for providers under Part B.

Effective date: Upon enactment

Hospital-Based Physician Reimbursement (Section 943)

Limitation is placed on special Medicare 100-percent reimbursement (with no deductible) for radiology and pathology services to physicians accepting assignment for all services furnished to hospital inpatients.

Effective date: Services provided after the sixth calendar month beginning after enactment

Determination of Reasonable Charges (Section 946)

Determination of Medicare reasonable charges for physician services will be based upon the date the medical service was rendered rather than the date on which the claim was processed.

Effective date: Bills submitted or requests for payment made on or after July 1, 1981

Secondary Liability of Medicare (Section 953)

This provision establishes that Medicare would be the secondary payor in cases where care can be paid for under an automobile insurance plan or liability insurance, including self-insured plans. The Secretary may waive these provisions if he/she determines that the probability of recovery of the amount involved does not warrant pursuit of the claim. The Medicare program would ordinarily pay for the beneficiary's care in the usual manner and then seek reimbursement from the private insurance carrier after, and to the extent that, such carrier's liability under the private policy for the services has been determined.

Effective date: Upon enactment

Temporary Delay in PIP (Section 959)

Provision is made for 3 weeks deferral of Periodic Interim Payments (PIP).

Effective date: Last 3 weeks of September 1981

III. Administrative Improvements

Philanthropy (Section 901)

This policy provides that the following items shall not be deducted from the operating costs of nonprofit hospitals in determining reimbursement amounts: 1) grants, gifts, or endowments and the income therefrom, which have not been designated by the donor for payment of any specific operating costs;

2) governmental grants or similar payments, under the terms of which the grant or payment is not available for use as operating funds; and 3) the proceeds from the sale or mortgage of any real estate or other capital asset which the hospital acquired through gift or grant and which, under the terms of the gift or grant, are not available for use as operating funds (except for recovery of the appropriate share of depreciation when gains or losses are realized from the disposal of depreciable assets.)

Effective date: Upon enactment

Withholding of Medicaid Payments (Section 905)

The Secretary's authority is broadened to withhold Federal matching funds under Medicaid to recover Medicare overpayments.

Effective date: Upon enactment

Quality Assurance Program for Clinical Laboratories (Section 911)

The Secretary's authority is extended to conduct the proficiency testing program for clinical laboratory personnel (practical nurses, therapists, and certain other personnel) until December 31, 1981.

Reporting of Financial Interest (Section 912)

Title XI requirements concerning reporting of financial interest are amended.

Effective date: Upon enactment

Exclusion of Health Care Professionals (Section 913)

All categories of health care professionals convicted of Medicare/Medicaid-related or Title XX crimes are excluded from program participation.

Effective date: Upon enactment

Criminal Standards for Medicare/Medicaid-Related Crimes (Section 917)

This section clarifies that criminal penalties apply only when conduct is "knowingly or willfully" undertaken.

Effective date: Upon enactment

Home Health Administration (Section 930)

The Secretary of HHS is required to take actions to achieve more effective administration of the Medicare home health benefit.

Effective date: Upon enactment

Bonding of Home Health Agencies (Section 930)

Medicare home health agencies are required to meet additional requirements (including the establishment of bonding or escrow accounts) which the Secre-

tary finds necessary to minimize financial risk, as a Medicare condition of participation.

Effective date: Upon enactment

Regional Intermediaries for Home Health Agencies (Section 930)

The Secretary of HHS is required to establish regional intermediaries for home health agencies.

Effective date: Upon enactment

Prohibition of Patient Certification by Physicians with Ownership Interest in Home Health Agencies (Section 930)

Physicians are prohibited from certifying to the need for care or preparing the plan of care for patients of a home health agency in which the physician has an ownership interest or other financial connection.

Effective: July 1, 1981

Payment of Home Health Agency Costs for Long-Term or Percentage-Based Contracts (Section 930)

Recognition is prohibited for costs incurred by Medicare home health agencies which are for contracts exceeding 5 years, or for which payment is determined based on a percentage of the agency's billing.

Effective date: July 1, 1981

Training of Home Health Aides (Section 930)

Medicare home health aides are required to have completed a training program approved by the Secretary of HHS.

Effective date: July 1, 1981

Repeal of Presumed Coverage Provisions (Section 941)

Repealed are Medicare provisions authorizing, by type of diagnosis, presumed periods of coverage for skilled nursing facility and home health services.

Effective date: January 1, 1981

Plan of Treatment for Speech Pathology (Section 944)

Speech pathologists are allowed to establish the plan of treatment for outpatient speech pathology services under Medicare.

Effective date: January 1, 1981

Termination of Buy-In (Section 945)

Permission is granted to persons whose State buy-in coverage for Part B of

Medicare has ended to terminate coverage effective with the month HCFA is notified that such coverage is no longer wanted.

Effective date: Third calendar month beginning after enactment

Payment to Teaching Hospitals (Section 948)

This provision repeals Section 227 of P.L. 92-603. Instead, it would permit reasonable charge reimbursement to physicians in teaching hospitals if the following specified conditions are met: the physician must exercise full personal control over the management of the patient's care; services are of the same character as those the physician furnishes to non-beneficiaries; and at least 25 percent of hospital's non-Medicare patients must pay all or a substantial part of charges (including the Medicaid payments) for similar services rendered to them. Additionally, it puts into statute current HCFA principles (Intermediary Letter 372) which provide that a physician must be the patient's attending physician if he/she is to be eligible for charge payments, and allows cost reimbursement to hospitals where all physicians elect it.

Effective date: Cost-accounting periods beginning January 1, 1981

Standards for Rural Hospitals (Section 949)

The Secretary of HHS is authorized to apply Medicare standards more flexibly to small rural hospitals (50 beds or less) where the health and safety of patients are not jeopardized. (Secretary could limit scope of services furnished by hospital.) Also, the Secretary's authority is extended to waive the 24-hour nursing requirement for such hospitals.

Effective date: Upon enactment

Certification and Utilization Review by Podiatrists (Section 951)

Podiatrists, acting within the scope of their practice, are allowed to be recognized as physicians under Medicare for purposes of physician certification and utilization review requirements.

Effective date: January 1, 1981

Access to Books and Records of Subcontractors (Section 952)

Medicare reimbursement is not available to providers for services furnished under contracts (whose cost or value over 12 months is $10,000 or more) with subcontractors unless the Secretary has access to books and records necessary to verify costs. The Secretary's request for access to books and records must be in writing, and the Secretary must specify in regulations the criteria and procedures for seeking and obtaining access to the relevant contracts, books, and records.

Effective date: Contracts entered into on or after the date of enactment

PRRB Jurisdiction (Section 955)

This provision requires Provider Reimbursement Review Board to determine

within 30 days whether it has jurisdiction over an issue brought before it by a provider, and authorizes judicial review without further administrative review where the Board decides it lacks jurisdiction.

Effective date: Upon enactment

Technical ESRD Amendments (Section 957)

The Secretary of HHS is authorized to enter into agreements with approved nonprofit agencies which assist Medicare patients to dialyze at home.

Effective date: Upon enactment

ESRD Report (Section 957)

The reporting date for End Stage Renal Disease Annual Report is changed to July 1.

Effective date: Upon enactment

Studies and Demonstrations (Section 958)

Studies are required on Medicare coverage for orthopedic shoes, respiratory therapy, second opinions for medical surgery, foot care, and home health services of dietitians; calls for demonstrations on coverage for clinical social workers and nutritional therapy for renal patients. Also, where relevant, any such study should include an evaluation of the effects of payment to independent practitioners on the coordination of care, cost, quality, organized settings, and utilization of services.

Effective date: Upon enactment

IV. Long-Term Care Facilities

Differential Reimbursement (Section 902)

This section authorizes reimbursement at the State Medicaid ICF and SNF rate where a patient requiring lower level of care under Medicare and Medicaid is inappropriately placed in the hospital; reduced reimbursement does not apply for first 2 years where hospital's occupancy is over 80 percent.

Effective date: Upon enactment of final regulations (not later than first day of sixth month after month of enactment)

Swing Beds (Section 904)

Swing-bed reimbursement is provided for small, rural hospitals which have been granted a certificate-of-need for provision of long-term care services. This section provides swing-bed demonstration authority for larger hospitals.

Effective date: Upon issuance of final regulations (no later than first day of sixth month after month of enactment)

Life Safety Code (Section 915)

The Secretary of HHS is authorized to determine when SNFs would be required to meet provisions of revised editions of Life Safety Code. (Facilities meeting the 1973 or 1967 edition would be "grandfathered.")

Effective date: Upon enactment

Intermediate Sanctions for SNFs and ICFs (Section 916)

The Secretary of HHS is authorized to impose intermediate sanctions for SNFs and ICFs which are out of compliance with conditions of participation less severe than decertification; i.e., denial of reimbursement after a designated date to out-of-compliance SNFs until facility corrects deficiencies (if not corrected after one year, the Secretary may decertify the facility); also, the Secretary is authorized to "look behind" State agency surveys on SNF and ICF compliance with conditions of participation in situations where the Secretary has cause to question the adequacy of the State's determination; allows States to impose intermediate sanctions, under Medicaid, upon SNFs and ICFs.

Effective date: Upon enactment

Study of Dual Participation of SNFs (Section 919)

Secretary of HHS is required to study the availability of SNFs under Medicare and Medicaid and the effect of requiring all SNFs which participate in Medicare to also participate in Medicaid (and vice-versa). Study and recommendations must be submitted to Congress within one year of enactment.

Alcohol Detoxification Facility Services (Section 931)

Medicare reimbursement is provided to inpatient detoxification services (related to alcoholism) in free-standing facilities.

Effective date: April 1, 1981

Transfer From Hospital to SNF (Section 950)

Medicare requirement that patients be transferred from a hospital to a SNF from within 14 days of discharge to qualify for posthospital extended care benefits is changed to 30 days.

Effective date: Upon enactment

P.L. 96-537 - Indian Health Care Amendments of 1980

Enactment date: December 17, 1980

Prior Law

No coverage.

Modification

The provision of P.L. 96-537 that affected the Medicaid and Medicare programs is a new Section 404 added to Title IV of the Indian Health Care Improvements Act. This section authorized the Secretary to make grants to or contracts with tribal organizations to improve access of Indians to health services. These programs and contracts will assist such organizations in establishing or administering programs on or near Federal Indian reservations and trust areas and in or near Alaska Native villages. These programs are intended to assist individual Indians in enrolling in Medicare, in paying monthly premiums for coverage under Medicare, and in applying for medical assistance under Medicaid.

Section 404 requires the Secretary, acting through the Indian Health Service, to impose certain conditions on any grant or contract made to a tribal organization. These conditions include, but are not limited to, requirements that the organization successfully undertake to --

(1) determine the population of Indians to be served that are or could be recipients of benefits under Medicaid and Medicare;

(2) assist individual Indians in becoming familiar with and utilizing such benefits;

(3) provide transportation to individual Indians to the appropriate offices for enrollment or application for medical assistance; and

(4) develop and implement a schedule of income levels in order to establish the level of premium payment that should be made for coverage of needy individuals; and methods of improving the participation of Indians in receiving Medicaid and Medicare benefits.

P.L. 96-611 - Medicare Coverage of Pneumococcal Vaccine

Enactment date: December 28, 1980

I. Coverage under Medicare for Pneumococcal Vaccine and Its Administration

Prior Law

No coverage.

Modification

Section 1 provides coverage under Part B of Medicare for pneumococcal vaccine and its administration. Payments will be made at 100 percent of the reasonable charge. No deductible or coinsurance will apply.

Effective date: July 1, 1981

II. Limits on SSI and Medicaid Eligibility for Those Who Dispose of Assets for Less Than Fair Market Value

Prior Law

Under the Supplemental Security Income (SSI) program, an individual who disposed of or transfered a resource prior to filing for benefits is not denied eligibility even though he/she could have been ineligible if the resource were retained. Since there was no prohibition against transfer of assets in the SSI program, States which cover all SSI (Title XVI) beneficiaries under their Medicaid programs could not place restrictions on their covered aged, blind, and disabled population. Only those States which had exercised the option to restrict eligibility under Section 1902(f) of the Social Security Act, and had a transfer of assets prohibition in place in January 1972, could use this prohibition in determining Medicaid eligibility for the aged, blind and disabled.

Modification

Section 5 provides that any resource or interest which an individual applying for SSI benefits gave away or sold for less than fair market value would still be considered as available for that person's support during the 2 years following the transfer of the asset. The amount considered available for support would be the value of the transferred asset less any compensation received for it. Individuals would have the opportunity to rebut the presumption that the transfer was made in order to qualify for benefits.

In the case of Medicaid, States have the option of establishing disposal of assets restrictions. States may establish procedures different from, but no more restrictive than, the SSI rules. However, a period of ineligibility could exceed 24 months if the uncompensated value of the resources in question exceeded $12,000. The period of ineligibility would have to bear a reasonable relationship to the uncompensated value.

Effective date: For aplications for SSI benefits filed on or after March 1, 1981. For the Medicaid option, upon enactment.

P.L. 97-35 - Omnibus Budget Reconciliation Act of 1981

Enactment date: August 13, 1981

I. Payments to Promote Closing and Conversion of Underutilized Hospital Facilities (Section 2101)

Prior Law

There was no provision for reimbursing hospitals for closure or conversion of surplus beds.

Modification

This provision establishes under Medicaid State plans and Medicare a "transitional allowance" for the closure, or conversion to approved use, of underutilized bed capacity or services. A hospital must have a determination made on whether it is eligible for the transitional allowance prior to undergoing actual closure or conversion.

The Secretary may include in a hospital's reasonable costs such a "transitional allowance" if he finds that the planned closure or conversion eliminates excess bed capacity, discontinues an underutilized service for which there are adequate alternatives or substitutes a needed service, and is consistent with findings of an appropriate health planning agency and with any applicable State program for reduction in the number of hospital beds in the State. In addition, if complete closure is contemplated, the hospital must be a private nonprofit or local government hospital and the closure cannot be for the purpose of replacing the existing facility. No more than 50 hospitals may be granted transitional allowances prior to January 1, 1984.

The Secretary is instructed to report to Congress on the effectiveness of the transitional allowance program.

Effective date: For services furnished during an accounting year beginning on or after October 1, 1981.

II. Adjustment in Payment for Inappropriate Hospital Services (Sections 2102 and 2173)

Prior Law

When a beneficiary no longer required acute hospital services, but must remain in the hospital because a medically necessary long-term bed was not available in the community, the hospital is to be reimbursed at a daily rate equal to the average Medicaid skilled nursing facility (SNF) or intermediate care facility (ICF) rate (whichever was appropriate for the level of care given). Those hospitals whose annual occupancy rate was equal to or greater than 80 percent were exempt from such reduced reimbursement and were paid at the acute-care rate.

Modification

The 80-percent exception from the differential reimbursement provision is

eliminated. A nonpublic hospital's payments would be reduced by Medicare if the Secretary determines there is an "excess capacity" of beds either in the institution or the area. In the case of public hospitals, the determination of "excess capacity" will be based on other public hospitals in the area which are under common ownership with that hospital. State Medicaid plans must also use reimbursement rates which reflect the level of care actually received.

Effective date: Applies to services provided on or after September 1, 1981.

III. Limitation on Medicare and Medicaid Payments for Certain Drugs (Section 2103)

Prior Law

Under the 1962 amendments to the Federal Food, Drug, and Cosmetic Act (FFDCA) drugs were required to be determined effective as well as safe before they can be approved by the Food and Drug Administration (FDA) for marketing. Drugs cannot be utilized under the Medicare and Medicaid programs unless they had been approved by the FDA. Thus, reimbursement could be discontinued for a drug if FDA had made a final determination (following opportunity for a hearing) not to approve the drug. Of course, since coverage of prescription drugs was a State option under Medicaid, reimbursement of specific drugs approved by FDA varied from State to State.

Modification

The provision prohibits Medicare Part B and Medicaid reimbursement for those prescription drugs which were approved prior to the 1962 amendments to the FFDCA and subsequently are determined to be less than effective in use. Payment would be discontinued at the time that the Secretary proposes an order to withdraw approval of the drug and issues a notice of an opportunity for a hearing. If a drug is subsequently proven to be effective, reimbursement would then be allowed.

Effective date: October 1, 1981

IV. Withholding of Payments for Certain Medicaid Providers (Section 2104)

Prior Law

The Secretary was authorized to withhold Medicaid payments to institutional and individual providers to offset overpayments made to them under the Medicare program. No similar provision existed for Medicaid overpayments.

Modification

The Secretary has authority to withhold payments due to Medicare providers to offset Medicaid overpayments. The Secretary would then reimburse State Medicaid agencies from the amount recovered. This provision is intended to be used in cases where the Medicare provider has terminated or substantially reduced participation in Medicaid.

Effective date: Upon enactment

V. Civil Monetary Penalties (Section 2105)

Prior Law

The Secretary had no authority to impose civil money penalties in cases of Medicare and Medicaid fraud. The Secretary had authority to exclude practitioners and providers from participation in Medicare and Medicaid for certain improper practices.

Modification

The bill gives the Secretary authority to assess penalties against Medicare and Medicaid practitioners and providers for fraudulent practices. Specifically, the Secretary can impose a civil penalty of up to $2000 for each fraudulently claimed item or service, impose an assessment of up to twice the amount of the fraudulent portion of the claim in lieu of damages, and deny participation in Medicare and Medicaid to persons filing fraudulent claims. Persons subject to a monetary penalty would be given written notice and an opportunity for an administrative hearing, prior to imposition of the penalty.

Effective: Upon enactment

VI. Technical Correction of Error Made by the Medicare and Medicaid Amendments of 1980 (Section 2106)

Prior Law

The 1980 Reconciliation Act deleted a provision of prior law which limited Medicare Part B reimbursement to the lower of the provider's customary charge or the reasonable cost of the covered service.

Modification

This provision restores the provision of prior law that was erroneously deleted.

Effective date: December 5, 1980

VII. Making Delegated Review Optional (Section 2111)

Prior Law

Current statutory provisions required Professional Standards Review Organizations (PSROs) to delegate the performance of review functions to hospitals which were willing and found by the PSRO to be capable of performing review.

Modification

PSROs will now have the discretion to choose which hospitals should be delegated review functions.

Effective date: Upon enactment

VIII. Assessment of PSRO Performance (Section 2112)

Present Law

Existing statutory provisions require that the National Professional Standards Review Council review the operations of PSROs to determine their effectiveness and comparative performance. The Secretary also evaluates whether a PSRO is substantially carrying out its duties in a satisfactory manner for the purpose of moving the organization from conditional to full designation or of terminating a PSRO.

Agreements with fully designated PSROs must be for a period of 12 months and can be terminated upon prior notice as prescribed in regulations, after opportunity for a formal hearing is provided. Judicial review of a termination action is not addressed.

The Secretary is required to establish a program to evaluate the cost-effectiveness of certain types of review. In implementing this program the Secretary must require that certain PSROs perform review of particular health care services to establish the cost-effectiveness of the review. If cost-effectiveness is demonstrated, the Secretary must require qualified PSROs to perform such review.

Modification

In addition to existing provisions, the Secretary is required to specify PSRO requirements relative to monitoring the quality of care, reducing unnecessary utilization and managing activities efficiently and to assess all PSROs' performance based on these requirements. The Secretary may refuse to renew agreements with PSROs found to be ineffective or inefficient, except that not more than 30 percent of the PSROs in existence on May 1, 1981, may be terminated during FY 1982.

The Secretary is given the discretion to enter into agreements with fully designated PSROs for less than 12 months. Fully designated PSROs must receive a 90-day notice of impending termination and will no longer have the opportunity for a formal hearing if their agreements were entered into after this provision's enactment. Termination actions are specifically precluded from judicial review. The Secretary is required to report to Congress the results of the PSRO assessment and any determinations made not to renew PSRO agreement on the basis of performance.

The Secretary may, at his discretion, require PSROs to review particular health care services when evaluation demonstrates such review is cost-effective or yields other significant benefits.

Effective dates:

- Specifications of performance assessment requirements and assessment of PSRO performance - September 30, 1981.

- Report to Congress on assessments and terminations - September 30, 1982.

- All other provisions in this section are effective upon enactment.

IX. Optional Use of PSROs Under State Medicaid Plans (Section 2113)

Present Law

PSROs are required to review health care services provided to Medicare, Medicaid, and Maternal and Child Health patients under Titles XVIII, XIX, and V of the Social Security Act. The cost of this review is paid entirely by Federal funds. PSROs review Medicaid patients according to administrative arrangements in the Memorandum of Understanding required to be negotiated with a State before the implementation of Medicaid review.

Modification

PSROs are required to review only those health care services provided to Medicare patients. States will be deemed to meet State Title XIX plan requirements for utilization and medical review if they contract with PSROs for review services not inconsistent with the PSROs' mandated review functions and the contract contains assurances of satisfactory performance required by the Secretary. Federal funds will support 75 percent of a State's costs attributable to PSRO review of Medicaid services.

Effective date: Applies to agreements entered into on or after October 1, 1981

X. Secretarial Determination in Lieu of PSRO Certification (Section 2113)

Present Law

PSROs (or, in the absence of a qualified PSRO, alternative organizations with review responsibility under the PSRO statute) must determine whether a Medicare patient requires a hospital level of care and, if not, whether SNF services are available. If the PSRO certifies that post-hospital extended care services are necessary but unavailable, the hospital will be reimbursed for continued inpatient care at a rate paid for lower level of care services.

Modification

In areas not served by PSROs, the Secretary or his designated agent will determine the level of care and availability of SNF care for the purpose of making differential reimbursement to hospitals.

Effective date: Upon enactment

XI. Elimination of Part A Coverage of Alcohol Detoxification Facility Services (Section 2121)

Present Law

Effective April 1, 1981, payment is authorized under Part A of Medicare for inpatient detoxification services provided in a free-standing facility. The Secretary is also charged with undertaking a number of studies and demonstration projects related to alcohol and drug detoxification and rehabilitation.

Modification

The provision repeals the coverage of inpatient services provided in free-standing alcohol detoxification facilities. It also repeals the requirement for certain studies and demonstration projects.

Effective date: Applies to inpatient stays beginning the 10th day after enactment

XII. Elimination of Occupational Therapy as a Basis for Initial Entitlement to Home Health Services (Section 2122)

Present Law

Effective July 1, 1981, the need for occupational therapy services was established as one of the qualifying services for Medicare home health coverage; e.g., if a patient who is homebound and certified by a physician to need care is in need of the services of an occupational therapist, he/she is also entitled to the full range of Medicare home health services.

Modification

Under this provision, the need for occupational therapy alone would not be enough to establish a patient's need for home health services. However, in those situations where a course of home health treatment had been instituted, because a patient needed skilled nursing care or physical or speech therapy, home health services would be continued even though the patient no longer required any skilled service other than occupational therapy.

Effective date: For plans of treatment established beginning December 1, 1981

XIII. Making Part A Coinsurance Current with the Year in Which Services Furnished (Section 2131)

Present Law

Part A coinsurance is imposed after the 60th day of covered hospital care in a spell of illness, for lifetime reserve days, and for SNF days beyond the 20th day in a spell of illness. Such coinsurance is a fraction of the deductible which is in effect for the year in which the spell of illness began. Where a beneficiary experiences a spell of illness which overlaps two or more calendar years, the coinsurance reflects the deductible in effect at the beginning of the period.

Modification

Part A coinsurance is based on the deductible for the calendar year in which services are received rather than the deductible in effect at the time the beneficiary's spell of illness began.

Effective date: January 1, 1982

XIV. Making Part A Coinsurance and Deductible More Current (Section 2132)

Present Law

A beneficiary is required to meet a deductible which is intended to cover the cost of 1 day of inpatient hospital care in a spell of illness. The Part A deductible ($204 for calendar year 1981) is mathematically derived through a formula using a base figure of $40. Coinsurance charges are imposed for additional covered inpatient services. Such charges are a fraction of the basic deductible amount.

Modification

This provision raises to $45 the base of the formula used in the determination of the Part A deductible. Coinsurance amounts will be figured on this new amount.

Effective date: January 1, 1982

XV. Elimination of Carryover From Previous Year of Incurred Expenses for Meeting the Part B Deductible (Section 2133)

Present Law

Beneficiaries are allowed to "carry-over" medical expenses incurred in the final quarter of a calendar year (and applied to the deductible for that year) into the following year to meet Part B deductible requirements for that year. The effect is that unreimbursed covered expenses in the current calendar year, plus those incurred in the last 3 months of the preceding year, are considered in determining whether an individual has met the deductible.

Modification

Medical expenses incurred in the last 3 months of the preceding year will be excluded in determining whether an individual has satisfied the Part B deductible in the current calendar year. Thus, expenses applied toward the deductible in any one calendar year must have been incurred in that year.

Effective Date: January 1, 1982 (for expenses incurred on or after October 1, 1981).

XVI. Increase in Part B Deductible (Section 2134)

Present Law

Under the supplementary medical insurance program, Medicare beneficiaries are generally required to incur $60 in expenses for covered medical services in a calendar year before the program will begin making payments.

Modification

This provision increased the $60 deductible to $75.

Effective date: January 1, 1982

XVII. Limitation on Routine Nursing Differential (Section 2141)

Present Law

In determining reasonable costs for inpatient routine hospital services under Medicare, the Secretary, by regulation, includes in reimbursement an additional 8.5 percent of inpatient routine nursing salary costs.

Modification

The routine nursing salary cost differential is reduced from 8.5 percent to 5 percent. This provision requires the Comptroller General to conduct a study to determine the extent to which higher payments are justified and report back to the Congress within 6 months after enactment (February 1982).

Effective date: Applies to cost reporting periods ending after September 30, 1981; however, in the case of a cost reporting period beginning before October 1, 1981, the reduction in payments will be applied only to that portion of the reporting period occurring after September 30, 1981.

XVIII. Limitation on Reasonable Cost and Reasonable Charge for Outpatient Services (Section 2142)

Present Law

Medicare recognizes no upper limit on reasonable costs or charges for outpatient services furnished by hospitals, community health centers, and clinics.

Modification

The Secretary is required to establish, by regulation, to the extent feasible, limitations on costs or charges that will be considered reasonable for outpatient services provided by hospitals, community health centers, or clinics and by physicians utilizing these facilities. Actual charges will be used in developing the limitations, which are to be reasonably related to the charges in the same area for similar services provided in physicians' offices. The limitations do not apply with respect to bona fide hospital emergency room services. The Secretary may also provide exceptions to these limitations in cases where similar services are not generally available in physicians' offices in the area.

Effective date: Upon enactment, subject to future negotiations.

XIX. Limits on Reimbursement to Hospitals (Section 2143)

Present Law

In determining the reasonable costs of services furnished to Medicare patients, the Secretary has established a schedule of reimbursement limits on hospital inpatient routine operating costs which is updated periodically. The limits under the methodology currently in use are on a per diem basis and are set at 112 percent of the mean costs of each comparison group of hospitals.

Modification

This provision reduced Medicare reimbursement limits currently applied to hospital inpatient routine operating costs from 112 to 108 percent of the mean or such other comparable or lower limits as the Secretary may determine. The Secretary may provide for exemptions and exceptions to this limitation as he deems appropriate.

Effective date: Applies to cost reporting periods ending after September 30, 1981; however, in the case of a cost reporting period beginning before October 1, 1981, the lower limit will be applied only to that portion of the reporting period occurring after September 30, 1981.

XX. Limits on Reimbursement to Home Health Agencies (Section 2144)

Present Law

In determining the reasonable cost of home health services for Medicare beneficiaries, the Secretary has established a schedule of reimbursement limits for home health agencies which is updated periodically. The limits are set at the 80th percentile of the average cost per visit and calculated by type of service (e.g., skilled nursing, home health aide). However, the limits are applied in the aggregate to each home health agency's costs based on the agency's total number of visits for all types of services.

Modification

This provision reduces the Medicare reimbursement limits applied to home health agency costs from the 80th to the 75th percentile, or such comparable or lower limit as the Secretary may determine. The Secretary may provide for exemptions and exceptions to this limitation as he deems appropriate.

Effective date: Applies to cost reporting periods ending after September 30, 1981; however, in the case of a cost reporting period beginning before October 1, 1981, the lower limit will be applied only to that portion of a reporting period occurring after September 30, 1981.

XXI. Incentive Reimbursement Rate for Renal Dialysis Services (Section 2145)

Present Law

Hospital-based dialysis facilities are paid 80 percent of their reasonable costs up to a national payment screen, and free-standing facilities are paid 80 percent of their reasonable charges up to the same screen. Facilities providing home dialysis may elect to be paid either a prospectively set target rate or Medicare reasonable cost or charges, as appropriate.

Modification

The new provision requires the Secretary to provide a method or methods for determining prospective reimbursement rate(s) for each mode of dialysis

furnished in the hospital-based or free-standing facility or at home. The method(s) would incorporate separate composite weighted formulae for the two types of facilities

However, if the Secretary determines, after detailed analysis, that another method (or methods) of determining prospectively the amounts of payments to be made for dialysis services would more effectively encourage the more efficient delivery of dialysis and would provide greater incentives for increased use of less costly home dialysis than the dual composite weighted formula, the Secretary may use that other method. The method(s) adopted must differentiate between hospital-based and free-standing facilities, and encourage home dialysis.

Effective date: On or after October 1, 1981 (including promulgation of regulations by this date).

XXII. Medicare Payments Secondary in Cases of End-Stage Renal Disease Services Covered Under Certain Group Health Policies (Section 2146)

Present Law

Medicare is the primary payor for end-stage renal disease (ESRD) benefits, and almost all people with permanent kidney failure who need renal dialysis treatment or a kidney transplant are eligible for Medicare coverage.

Modification

This provision:

(1) Makes Medicare the secondary payor for the first 12 months after an individual, who has private group health insurance coverage, is eligible for Medicare ESRD benefits. Ultimately, Medicare would reimburse only its share of those covered costs not covered by the private plan. Any Medicare payment (on an interim basis) for services during this period would be conditional on reimbursement to the program when payment is made by the plan.

(2) Does not allow as a tax deduction the expenses paid or incurred by an employer for a group health plan if the plan differentiates in the benefits it provides between individuals having end-stage renal disease and other individuals covered by the plan.

This provision would apply only where the renal patient is under age 65 and not entitled to Medicare because of receipt of social security disability benefits.

Effective date: (1) October 1, 1981; (2) January 1, 1982

XXIII. Elimination of Unlimited Open Enrollment (Section 2151)

Present Law

An individual may enroll in Part B of the Medicare program during an initial enrollment period (which begins with the third month before the month in which the individual becomes age 65 and extends for 7 months). If an individual fails to enroll during his or her initial enrollment period, enrollment is

possible during a continuous open enrollment period. Entitlement under the open enrollment period begins on the third calendar month following the month of enrollment.

Modification

This provision repeals Medicare Part B continuous open enrollment and reinstitutes the general enrollment period which occurs January 1 through March 31 of each year. Coverage then becomes effective July 1.

Effective date: October 1, 1981

XXIV. Utilization Guidelines for Provision of Home Health Services (Section 2152)

Present Law

As a condition of payment for home health services, a physician must certify that the services are required because the patient is homebound and needs intermittent skilled nursing care, physical therapy, or speech therapy, or, as of July 1, occupational therapy. In addition, the physician must establish and periodically review a plan of care. There are no direct requirements or guidelines for intermediaries.

Modification

Under this provision, the Secretary is required to establish utilization guidelines and issue instructions for Medicare intermediaries to establish a program for reviewing claims on a sample basis to monitor whether the claims meet Medicare coverage criteria.

Effective date: October 1, 1981

XXV. Repeal of Statutory Time Limitation on Agreements with Skilled Nursing Facilities (Section 2153)

Present Law

SNF provider agreements are renewed on an annual basis. In order to renew an agreement, a SNF must undergo a survey and certification process to confirm its compliance with applicable health and safety requirements.

Modification

The 12-month statutory limitation on agreements with SNFs is repealed.

Effective date: Upon enactment

XXVI. Removal of Limitation on Number of Medicare Demonstration Projects (Section 2154)

Present Law

The Secretary has authority to approve the use of alternative Medicare reimbursement rates or methods in a State in connection with a demonstration

project on continuing rising hospital costs. The Secretary is required to continue to reimburse hospitals in accordance with the system used in a State cost containment demonstration when the demonstration ends, provided the State program meets certain tests of effectiveness in controlling costs and the State elects to continue the reimbursement system. No more than six Statewide demonstration projects can be continued or implemented under this authority.

Modification

This provision of current law limiting to six the number of Statewide Medicare hospital reimbursement demonstration projects is repealed.

Effective date: Upon enactment

XXVII. Repeal of Temporary Delay in Periodic Interim Payments (Section 2155)

Present Law

A one-time deferral of the Periodic Interim Payment (PIP) method of reimbursement to hospitals for the last 3 weeks of FY 1981 is authorized.

Modification

This provision repeals the deferral of PIP.

Effective date: Upon enactment

PART II

Annual Report
on the
End-Stage Renal Disease Program

(Calendar Year 1981)

EXECUTIVE SUMMARY

The End-Stage Renal Disease (ESRD) part of the report is prepared in accordance with Section 1881(g) of the Social Security Act, and addresses the 15 specific requests for data enumerated therein. It covers activities related to the care of ESRD patients that took place in calendar year 1981, and includes information on the number of patients utilizing the various forms of treatment, the costs involved, discussions of cost savings experiments, and basic kidney research conducted during the year.

The total dialysis population increased by 12.5 percent in 1981, to 58,924 from 52,364 in 1980. The home dialysis population increased by 23.7 percent, to 9,474 from 7,661 in 1980. The net increase in home patients was due largely to the growth of continuous ambulatory peritoneal dialysis (CAPD) from 2,334 patients in 1980 to 4,347 patients in 1981. CAPD now accounts for 45.9 percent of all home patients. When the figures for home dialysis were arrayed by Network, the home dialysis population ranged from 6.8 percent to 43.9 percent. Thirty Networks showed a net increase over 1980 in the percentage of patients treated at home, and 2 showed decreases. At the end of 1981, the home dialysis population accounted for 16.1 percent of the total dialysis population, a net increase of 1.5 percent over 1980.

The number of patients receiving a transplant increased by 4.4 percent in 1981, to 4,878 from 4,671 in 1980. Patients transplanted in 1981 accounted for 7.7 percent of the total ESRD population, a net decrease of 0.5 percent over 1980. The number of patients transplanted by Network in 1981 ranged from a low of 12 to a high of 312. Sixteen Networks showed a net increase over 1980 in the number of ESRD patients transplanted, 14 showed decreases, and 2 showed no change. The percentage of total transplants performed with kidneys from living related donors increased to 29.8 percent from 27.1 percent in 1980.

Total expenditures for services rendered during calendar year 1981 were almost $1.4 billion, based on bills posted as of July 2, 1982. The 1981 figure will increase as bills continue to be posted. The average payment rate for both hospital and freestanding dialysis units for dialysis was $148 per treatment without physicians' fees. The average kidney acquisition charge in 1981 was $7,562 for a living related donor kidney and $7,172 for a cadaveric kidney. The average estimated kidney acquisition costs were $7,561 and $7,125, respectively. The average estimated cost for a transplant was $26,817 in 1981.

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OVERVIEW

CHAPTER I. OVERVIEW

A. LEGISLATIVE BACKGROUND

The End-Stage Renal Disease (ESRD) program of Medicare was established by Section 2991 of the Social Security Amendments of 1972 (P. L. 92-603). That law extended Medicare coverage to individuals who have permanent kidney failure, require either dialysis or transplantation, and meet certain other eligibility requirements. In general, in order to be eligible for ESRD program benefits, a person must be undergoing a regular course of renal dialysis or have had a kidney transplant, and must be either: (1) fully or currently insured under social security at the onset of the disease; (2) a monthly social security beneficiary; or (3) the spouse or dependent child of an eligible person.

The Health Care Financing Administration (HCFA) is assigned the primary responsibility for overseeing the medical, fiscal, and related aspects of the ESRD program. In addition to using carriers and intermediaries, which contract with the Federal Government to reimburse providers and others for services rendered, End-Stage Renal Disease Networks were intended to aid in the administration of the ESRD program by promoting high quality care in ESRD dialysis and transplant facilities, and the efficient distribution and utilization of resources in the delivery of renal services. An ESRD Network is an approved organized group of ESRD facilities in a designated geographic area which collectively furnishes the necessary care for ESRD patients in the population served. Thirty-two Networks are operational in each of the 50 States and U.S. territories (see Appendix D). As specified in legislation and regulation, Networks are expected to accomplish several functions, which include increasing the use of home dialysis and renal transplantation, monitoring facility patient care planning, establishing standards for patient care, encouraging rehabilitation, and analyzing and exchanging medical care data.

Over the last few years, the End-Stage Renal Disease program has experienced significant increases in the patient base and program expenditures. During 1981, it was determined that emphasis should be placed on efforts to effectively contain costs and influence the selection of economical modalities of care while maintaining quality of care.

On August 13, 1981, Congress passed the Omnibus Reconciliation Act of 1981 (P.L. 97-35). Section 2145 of that Act amended Section 1881 of the Social Security Act, requiring HCFA to develop a prospective reimbursement system for outpatient maintenance dialysis that promotes home dialysis. The Act instructed the Department of Health and Human Services to reimburse home dialysis and infacility dialysis under composite rates or use some other method that, after detailed analysis, is determined to be more efficient and to promote home dialysis more effectively. Section 2145 also revised the provisions regarding reimbursement for physicians' services to provide incentives for the increased use of home dialysis.

As a result, HCFA devoted its resources during 1981 to formulating proposed regulations which would implement the mandate of Section 2145 of the Omnibus Reconciliation Act of 1981.

B. SCOPE OF REPORT

This report will address the items specified in Section 1881(g) of the Social Security Act, which requires the following information:

1. The number of patients, nationally and by renal disease Network, on dialysis (self-dialysis or otherwise) at home and in facilities.

2. The number of new patients entering dialysis at home and in facilities during the year.

3. The number of facilities providing dialysis and the utilization rates of those facilities.

4. The number of kidney transplants, by source of donor organ.

5. The number of patients awaiting organs for transplant.

6. The number of transplant failures.

7. The range of costs of kidney acquisitions, by type of facility and by region.

8. The number of facilities providing transplants and the number of transplants performed per facility.

9. Patient mortality and morbidity rates.

10. The average annual cost of hospitalization for ancillary problems in dialysis and transplant patients, and drug costs for transplant patients.

11. Medicare payment rates for dialysis, transplant procedures, and physician services, along with any changes in such rates during the year and the reasons for those changes.

12. The results of cost-saving experiments.

13. The results of basic kidney disease research conducted by the Federal Government, private institutions, and foreign governments.
14. Information on the activities of Medical Review Boards and other Network organizations.

15. Estimated program costs over the next five years.

C. DATA COLLECTION

All information concerning the numbers of patients in the various treatment modalities, and the number of transplants performed, was gathered through use of a data collection form known as the End-Stage Renal Disease Facility Survey. For 1981, the Facility Survey was distributed twice, the first time to cover the first six months of calendar year 1981, and the second time to cover the last six months of the year.

A total of 1,135 facilities which perform some form of maintenance dialysis and 156 hospitals which perform kidney transplants, were requested to complete a Facility Survey (see Table 1). The rate of compliance with that request was 100 percent.

The number of facilities surveyed does not equal the total number of ESRD certified facilities in the country. Some ESRD hospitals were excluded from consideration because they provide only backup dialysis on an acute basis, rather than routine outpatient maintenance dialysis. Other facilities were not requested to complete a Facility Survey because they were so recently certified there was not sufficient time to include them in the survey population.

The data reported via the Facility Survey delineates totals for all patients with end-stage renal disease. That is, the data are not differentiated between patients who have attained entitlement to Medicare benefits and those who have not, within the various treatment modalities.

Although we have no data to definitely indicate what portion of the patients in any particular treatment modality were recipients of Medicare benefits, we know through the Facility Survey that at the end of 1981, 87.1 percent of all patients were entitled to Medicare benefits, 6.4 percent had applications for Medicare entitlement pending, and 6.5 percent were not Medicare eligible.

ESRD FACILITIES SURVEYED AND REPORTING

TABLE 1

ESRD NETWORK	DIALYSIS FACILITY SURVEYED	DIALYSIS FACILITY REPORTING	TRANSPLANT FACILITY SURVEYED	TRANSPLANT FACILITY REPORTING
1	8	8	1	1
2	26	26	5	5
3	50	50	3	3
4	89	89	11	11
5	23	23	2	2
6	27	27	5	5
7	26	26	3	3
8	18	18	2	2
9	30	30	8	8
10	32	32	5	5
11	72	72	8	8
12	31	31	5	5
13	20	20	2	2
14	34	34	10	10
15	61	61	7	7
16	13	13	3	3
17	23	23	6	6
18	61	61	4	4
19	68	68	4	4
20	49	49	5	5
21	18	18	5	5
22	47	47	6	6
23	22	22	5	5
24	55	55	7	7
25	61	61	6	6
26	24	24	6	6
27	14	14	2	2
28	36	36	9	9
29	13	13	1	1
30	42	42	4	4
31	16	16	3	3
32	26	26	3	3
TOTAL	1,135	1,135	156	156

SOURCE: ESRD MEDICAL INFORMATION SYSTEM 1981 FACILITY SURVEYS.

CHAPTER II. DIALYSIS

Material in this section responds to:

Section 1881(g)(1) "the number of patients nationally and by renal disease Network on dialysis (self-dialysis or otherwise) at home and in facilities"

Section 1881(g)(2) "the number of new patients entering dialysis at home and in facilities durirg the year"

Section 1881(g)(3) "the number of facilities providing dialysis and the utilization rates of those facilities"

A. PATIENT PROFILE

Total Dialysis Population

As of December 31, 1981, the total dialysis population was 58,924 (see Table 3). The ESRD Networks' total dialysis populations range in size from 396 patients to 4,447 dialysis patients. However, the 10 largest Networks contain approximately 55 percent of the total dialysis population.

Incenter Dialysis Population

The number of patients receiving their treatments in facilities was 49,450 at the end of 1981 (see Table 3). This represents 83.9 percent of the total dialysis population. The ESRD Networks range in size from 338 incenter dialysis patients to 4,106 incenter dialysis patients. Of the incenter population, 47,917, or 96.9 percent, were receiving staff-assisted outpatient maintenance dialysis; 1,038, or 2.1 percent, were performing incenter self-dialysis; and 495, or 1.0 percent, were undergoing self-care dialysis training (see Table 4).

Home Dialysis Population

There were 9,474 patients dialyzing at home at the end of 1981 (see Table 5). This represents 16.1 percent of the total dialysis population. The ESRD Networks' home dialysis populations range in size from 58 patients to 603 patients. Almost two-thirds, 64.6 percent, of the home dialysis population are found in less than half (14) of the Networks. The percentage of home dialysis patients in the Networks ranges from 6.8 percent to 43.9 percent. Of the home dialysis population, 4,481, or 47.3 percent, were using hemodialysis; 646, or 6.8 percent, were using peritoneal dialysis; and 4,347, or 45.9 percent, were using continuous ambulatory peritoneal dialysis (CAPD) (see Table 6).

B. NEW PATIENT CHARACTERISTICS

Total Dialysis Population

The total dialysis population increased by 6,560 patients (see Table 7B). This is an increase of 12.5 percent. The ESRD Networks had total population growths ranging from 22 patients to 510 patients. On a percentage basis, the range was 5.9 percent to 23.1 percent, with 3 Networks reporting growth over 20 percent.

Incenter Dialysis Population

The incenter dialysis population increased by 4,747 patients (see Table 7B). This is an increase of 10.6 percent. However, the proportion of the total dialysis population represented by incenter dialysis patients decreased from 85.3 percent in 1980 to 83.9 percent in 1981 (see Table 7A). The ESRD Networks had incenter population changes ranging from an increase of 30 patients to an increase of 384 patients.

Home Dialysis Population

The home dialysis population increased by 1,813 patients (see Table 7B). This is an increase of 23.7 percent. The portion of the total dialysis population represented by home dialysis patients increased from 14.6 percent in 1980 to 16.1 percent in 1981. The ESRD Networks had home dialysis population changes ranging from a decrease of eight patients to an increase of 138 patients. The portion of the total dialysis population represented by home dialysis patients within the individual Networks ranged from 6.8 percent to 43.9 percent. Compared to 1980, 28 Networks showed an increase and 4 Networks showed a decrease in the percent of total dialysis population on home dialysis.

New Starts

Of the 21,367 patients starting a course of dialysis for the first time ever during 1981, 1,948, or 9.1 percent, chose home dialysis and 19,419, or 90.9 percent, chose incenter dialysis. Comparable figures for 1980 were 1,727, or 8.8 percent, of the new starts choosing home dialysis and 17,960, or 91.2 percent, choosing incenter dialysis.

Self-Care

Overall, patients performing some form of self-care comprise 18.7 percent of the total dialysis population. The distribution of patients in self-care is as follows:

TABLE 2. ANNUAL DISTRIBUTION OF SELF-CARE DIALYSIS PATIENTS

Treatment Setting	1980	1981
Home	7,661	9,474
Incenter	781	1,038
Training	521	495
Total	8,963	11,007
Percentage of Dialysis Population	(17.1%)	(18.7%)

Figures 1, 2, and 3 show data on dialysis treatment modalities by Network, home dialysis, and dialysis settings comparing 1981 to 1980, and are located following Tables 7A and 7B.

DIALYSIS TREATMENT SETTING OF ESRD PATIENTS BY ESRD NETWORK

ESRD NETWORK	FACILITIES SURVEYED	FACILITIES REPORTING	TOTAL DIALYSIS PATIENTS	DIALYZED IN-UNIT TOTAL	DIALYZED IN-UNIT PERCENT	DIALYZED AT HOME TOTAL	DIALYZED AT HOME PERCENT
1	6	6	396	338	85.4%	58	14.6%
2	26	26	1,460	857	58.7%	603	41.3%
3	50	50	2,532	2,181	86.1%	351	13.9%
4	89	89	4,447	4,106	92.3%	341	7.7%
5	23	23	949	647	68.2%	302	31.8%
6	27	27	967	805	83.2%	162	16.8%
7	26	26	923	700	75.8%	223	24.2%
8	18	18	697	518	74.3%	179	25.7%
9	30	30	1,546	1,172	75.8%	374	24.2%
10	32	32	886	707	79.8%	179	20.2%
11	72	72	4,125	3,565	86.4%	560	13.6%
12	31	31	1,233	1,140	92.5%	93	7.5%
13	20	20	675	503	74.5%	172	25.5%
14	34	34	2,004	1,574	78.5%	430	21.5%
15	61	61	2,825	2,632	93.2%	193	6.8%
16	13	13	1,217	683	56.1%	534	43.9%
17	23	23	1,163	934	80.3%	229	19.7%
18	61	61	3,011	2,413	80.1%	598	19.9%
19	68	68	3,270	2,985	91.3%	285	8.7%
20	49	49	2,784	2,435	87.5%	349	12.5%
21	18	18	1,449	1,066	73.6%	383	26.4%
22	47	47	2,408	2,040	84.7%	368	15.3%
23	22	22	1,234	1,090	88.3%	144	11.7%
24	55	55	2,636	2,259	85.7%	377	14.3%
25	61	61	4,308	3,806	88.3%	502	11.7%
26	24	24	1,149	946	82.3%	203	17.7%
27	14	14	803	685	85.3%	118	14.7%
28	36	36	2,174	1,886	86.8%	288	13.2%
29	13	13	794	706	88.9%	88	11.1%
30	42	42	1,795	1,463	81.5%	332	18.5%
31	16	16	704	599	85.1%	105	14.9%
32	26	26	2,360	2,009	85.1%	351	14.9%
TOTAL	1,135	1,135	58,924	49,450	83.9%	9,474	16.1%

PERCENTAGES MAY NOT ADD TO 100.0% DUE TO ROUNDING

SOURCE: ESRD MEDICAL INFORMATION SYSTEM 1981 FACILITY SURVEYS.

IN-UNIT SELF-CARE POPULATION BY TYPE OF DIALYSIS

TABLE 4

NETWORK	HEMODIALYSIS NUMBER	HEMODIALYSIS PERCENT	PERITONEAL NUMBER	PERITONEAL PERCENT	SELF-CARE TRAINING HEMO	SELF-CARE TRAINING PERI	SELF-CARE TRAINING CAPD
1	131	38.8%	0	0.0%	11	0	2
2	4	0.5%	0	0.0%	16	0	5
3	92	4.2%	0	0.0%	22	0	7
4	66	1.6%	0	0.0%	47	1	4
5	29	4.5%	0	0.0%	0	0	1
6	4	0.5%	0	0.0%	0	2	5
7	0	0.0%	0	0.0%	2	0	1
8	0	0.0%	0	0.0%	5	1	1
9	0	0.0%	0	0.0%	16	0	6
10	0	0.0%	0	0.0%	1	0	0
11	82	2.3%	0	0.0%	15	0	15
12	2	0.2%	0	0.0%	2	5	0
13	35	7.0%	0	0.0%	1	0	3
14	25	1.6%	0	0.0%	13	0	8
15	76	2.9%	0	0.0%	22	0	2
16	0	0.0%	0	0.0%	16	0	7
17	22	2.4%	0	0.0%	7	0	3
18	7	0.3%	0	0.0%	18	0	4
19	6	0.2%	0	0.0%	3	0	10
20	37	1.5%	0	0.0%	6	0	3
21	0	0.0%	0	0.0%	10	1	1
22	21	1.0%	0	0.0%	5	0	4
23	22	2.0%	0	0.0%	1	0	0
24	34	1.5%	7	0.3%	11	7	5
25	146	3.8%	0	0.0%	30	0	6
26	35	3.7%	0	0.0%	24	1	4
27	9	1.3%	0	0.0%	3	0	1
28	12	0.6%	0	0.0%	5	2	0
29	0	0.0%	0	0.0%	0	0	0
30	16	1.1%	0	0.0%	7	1	2
31	45	7.5%	0	0.0%	1	0	5
32	73	3.6%	0	0.0%	32	5	2
TOTAL	1,031	2.1%	7	0.0%	352	28	117

PERCENTAGES MAY NOT ADD TO 100.0% DUE TO ROUNDING

SOURCE: ESRD MEDICAL INFORMATION SYSTEM 1981 FACILITY SURVEYS.

ANNUAL DISTRIBUTION OF HOME PATIENTS BY ESRD NETWORK

TABLE 5

ESRD NETWORK	1980 HOME PATIENTS TOTAL	1980 HOME PATIENTS PERCENT	1981 HOME PATIENTS TOTAL	1981 HOME PATIENTS PERCENT
1	66	17.6%	58	14.6%
2	621	45.1%	603	41.3%
3	249	11.0%	351	13.9%
4	249	6.1%	341	7.7%
5	269	30.3%	302	31.8%
6	127	14.5%	162	16.8%
7	197	26.2%	223	24.2%
8	148	24.5%	179	25.7%
9	322	24.0%	374	24.2%
10	150	19.0%	179	20.2%
11	422	11.6%	560	13.6%
12	76	6.8%	93	7.5%
13	150	24.1%	172	25.5%
14	330	17.9%	430	21.5%
15	134	5.1%	193	6.8%
16	452	43.2%	534	43.9%
17	148	15.0%	229	19.7%
18	490	18.8%	598	19.9%
19	212	7.5%	285	8.7%
20	234	10.2%	349	12.5%
21	355	27.7%	383	26.4%
22	262	12.2%	368	15.3%
23	123	11.6%	144	11.7%
24	300	12.3%	377	14.3%
25	415	10.5%	502	11.7%
26	161	15.8%	203	17.7%
27	79	10.8%	118	14.7%
28	226	11.5%	288	13.2%
29	71	9.9%	88	11.1%
30	281	17.4%	332	18.5%
31	80	12.4%	105	14.9%
32	264	12.7%	351	14.9%
TOTAL	7,661	14.6%	9,474	16.1%

SOURCE: ESRD MEDICAL INFORMATION SYSTEM 1980, 1981 FACILITY SURVEYS.

TABLE 6

HOME PATIENT MODALITIES BY ESRD NETWORK

NETWORK	HOME PATIENTS HEMODIALYSIS TOTAL	HOME PATIENTS HEMODIALYSIS PERCENT	HOME PATIENTS PERITONEAL DIALYSIS TOTAL	HOME PATIENTS PERITONEAL DIALYSIS PERCENT	HOME PATIENTS ---- CAPD ---- TOTAL	HOME PATIENTS ---- CAPD ---- PERCENT
1	45	78%	0	0%	13	22%
2	432	72%	28	5%	143	24%
3	160	46%	5	1%	186	53%
4	91	27%	14	4%	236	69%
5	225	75%	39	13%	38	13%
6	49	30%	5	3%	108	67%
7	136	61%	12	5%	75	34%
8	75	42%	19	11%	85	47%
9	199	53%	13	3%	162	43%
10	90	50%	19	11%	70	39%
11	200	36%	65	12%	295	53%
12	33	35%	15	16%	45	48%
13	53	31%	3	2%	116	67%
14	158	37%	24	6%	248	58%
15	90	47%	9	5%	94	49%
16	319	60%	0	0%	215	40%
17	51	22%	12	5%	166	72%
18	329	55%	50	8%	219	37%
19	72	25%	21	7%	192	67%
20	139	40%	19	5%	191	55%
21	170	44%	33	9%	180	47%
22	125	34%	39	11%	204	55%
23	53	37%	8	6%	83	58%
24	130	34%	45	12%	202	54%
25	306	61%	5	1%	191	38%
26	130	64%	30	15%	43	21%
27	25	21%	0	0%	93	79%
28	186	65%	12	4%	90	31%
29	48	55%	0	0%	40	45%
30	141	42%	52	16%	139	42%
31	51	49%	22	21%	32	30%
32	170	48%	28	8%	153	44%
TOTAL	4,481	47%	646	7%	4,347	46%

PERCENTAGES MAY NOT ADD TO 100.0% DUE TO ROUNDING

SOURCE: ESRD MEDICAL INFORMATION SYSTEM 1981 FACILITY SURVEYS.

TABLE 7A. CHANGE IN THE PERCENTAGE DISTRIBUTION OF THE DIALYSIS POPULATION - 1980 TO 1981

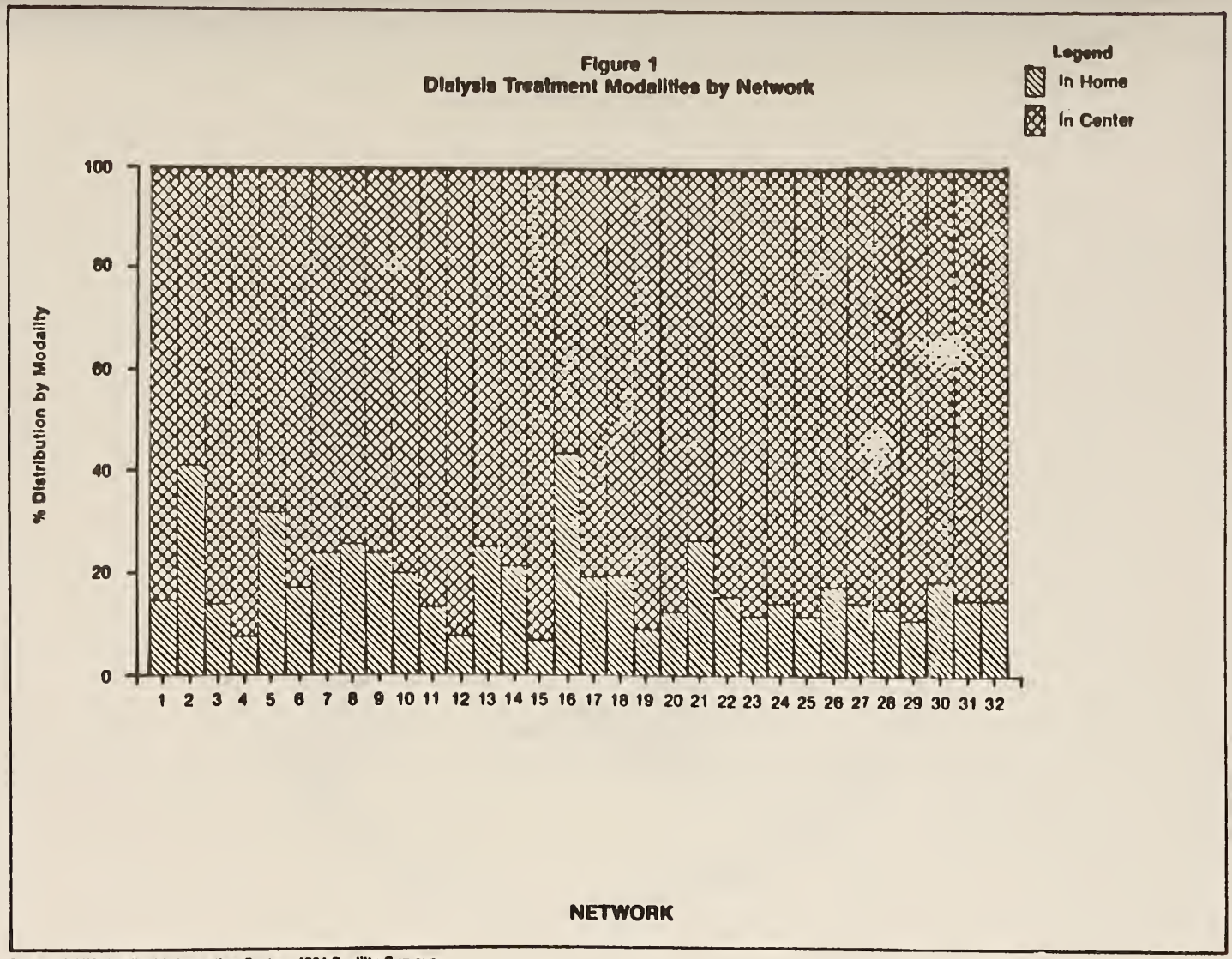
	1980	Percent Distribution	1981	Percent Distribution	Change in Percent Distribution
Total Dialysis Population	52,364	100.00	58,924	100.00	--
Incenter Dialysis Population	44,703	85.37	49,450	83.92	-1.45
Home Dialysis Population	7,661	14.63	9,474	16.08	+1.45

TABLE 7B. NUMBER AND PERCENT INCREASE OF DIALYSIS PATIENTS

	1980	1981	Increase	Percent Increase
Total Dialysis Population	52,364	58,924	6,560	12.5
Incenter Dialysis Population	44,703	49,450	4,747	10.6
Home Dialysis Population	7,661	9,474	1,813	23.7

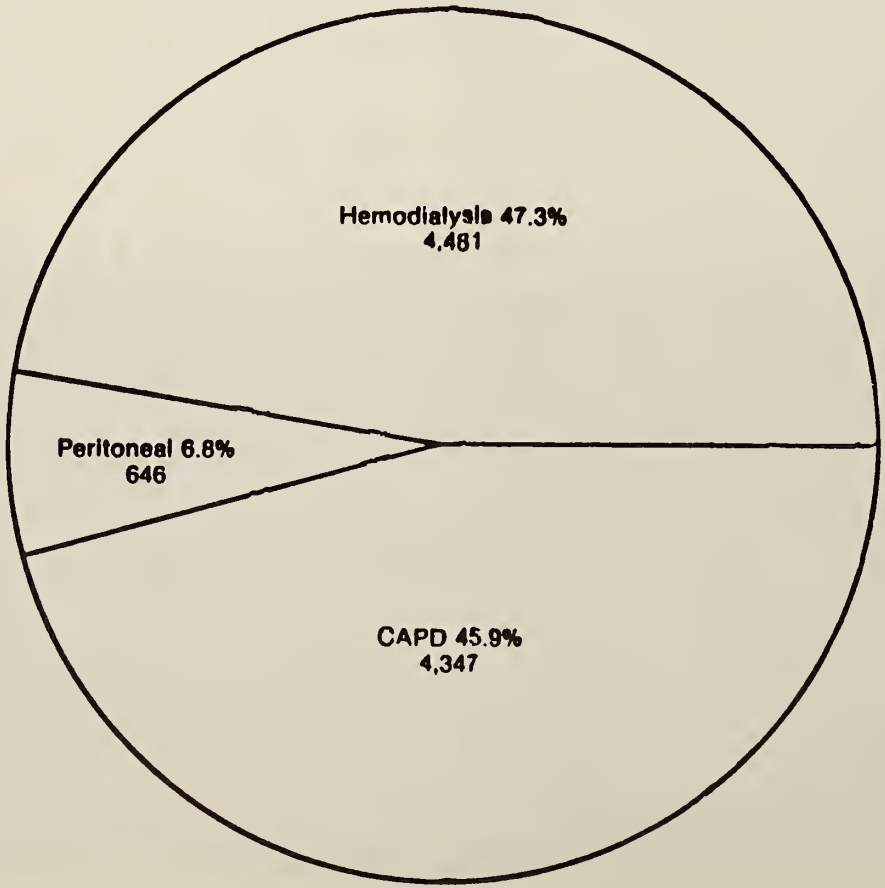
SOURCE: ESRD MEDICAL INFORMATION SYSTEM 1980, 1981 FACILITY SURVEYS

Figure 1
Dialysis Treatment Modalities by Network

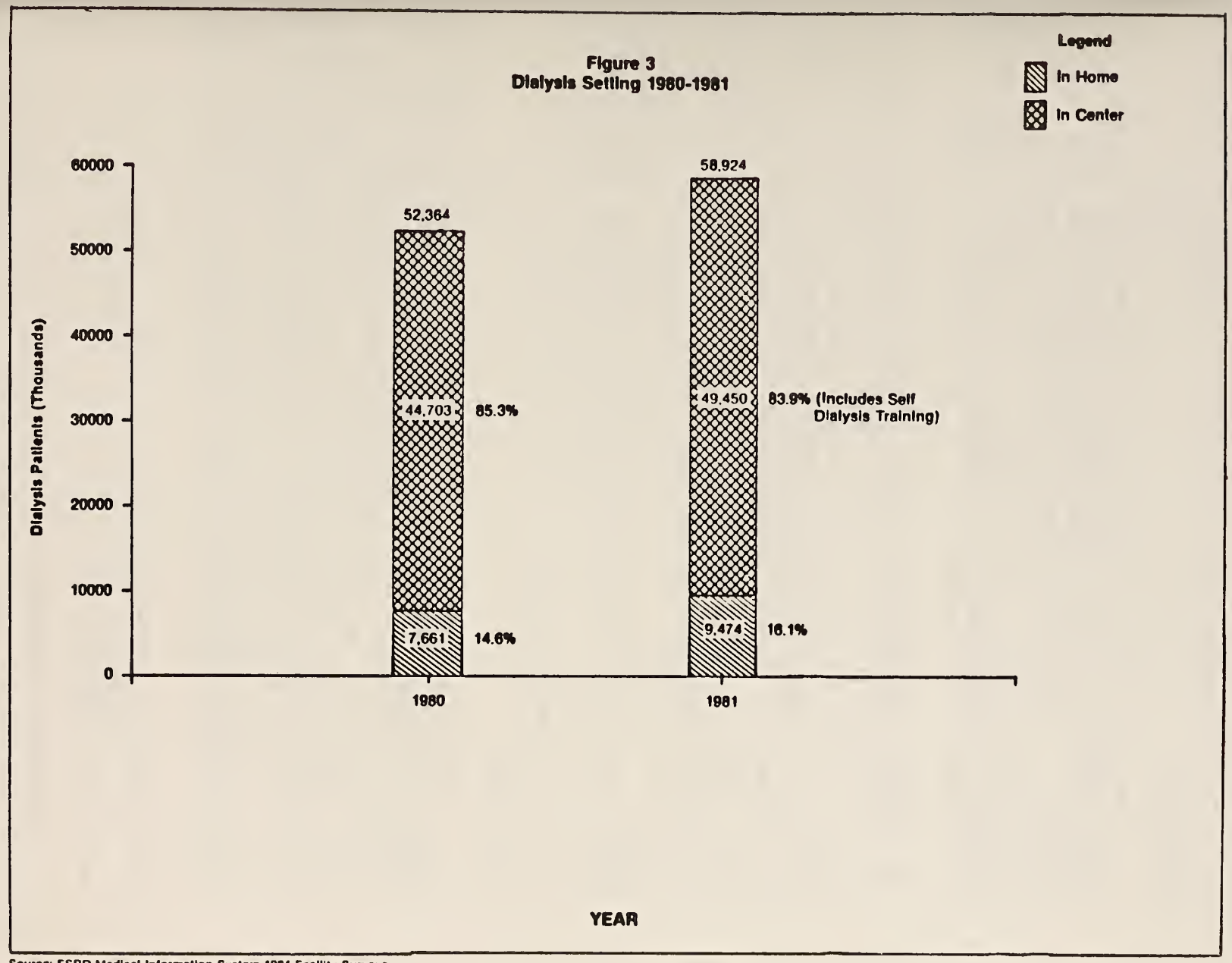


Source: ESRD Medical Information System 1981 Facility Surveys

Figure 2
Home Dialysis Modality—1981



Source: ESRD Medical Information System 1981 Facility Surveys



Source: ESRD Medical Information System 1981 Facility Surveys
1980

Certification

As of December 1981, there were 1,154 hospitals and facilities approved to provide dialysis services. Of these, 561 were renal dialysis centers (RDC). An RDC is a hospital unit which provides the total range of diagnostic, therapeutic, and rehabilitative services, except transplantation, required for the care of ESRD dialysis patients. The remaining 593 facilities were renal dialysis facilities (RDF). An RDF is a facility, hospital-based or independent, approved to furnish only dialysis services to ESRD patients.

The number of certified dialysis facilities increased in 1981 by approximately 8 percent (92). Sixty-four percent (59) of these were RDFs and 35 percent (33) were RDCs. Each approved dialysis facilitity is certified to provide any of a variety of specialized services. These services include staff-assisted dialysis (extracorporeal or peritoneal), self-dialysis training (extracorporeal or peritoneal), self-dialysis, home or self-dialysis training (extracorporeal and peritoneal dialysis) and CAPD training. The majority of approved facilities are certified to provide some type of home or self-dialysis training. There appears to be a trend developing in the RDF area reflective of movement from a hospital-based operation to that of an independent or freestanding operation. The number of RDF hospital-based facilities actually decreased (minus 21), whereas the number of RDF independent or freestanding facilities recorded a substantial increase (plus 80) when compared with last year's totals. The breakout of ownership; i.e., profit vs. nonprofit, is shown in Figure 4.

MUR Criteria

As a condition of coverage, ESRD facilities (both RDCs and RDFs) are required to meet minimum utilization rates (MUR). Regulations specify the MURs for which a facility will receive either an unconditional or conditional certification. In order to receive unconditional status, a facility must meet or exceed MUR criteria. Conditional status may be granted for not more than 4 consecutive calendar years to a facility which is borderline in its compliance with MUR, and its status may be examined each year to ascertain its compliance with MUR. Regulations permit an exception to the MUR requirements for a facility that is determined not to have sufficient patients in its service area to meet such a rate, if the facility's absence would adversely affect the achievement of ESRD program objectives.

The criteria for the MUR classifications are as follows:

Renal Dialysis Facilities

The utilization standards for renal dialysis facilities are:

(1) For any facility located within a standard metropolitan statistical area of 500,000 population or greater:

(a) Unconditional status - six or more dialysis stations with performance of an average of 4.5 or more dialyses per station per week.

(b) Conditional status - six or more dialysis stations with performance of an average of between 4.0 and 4.5 dialyses per station per week, or four or five dialysis stations with performance of an average of 4.5 or more dialyses per station per week.

(2) For any facility located in a standard metropolitan statistical area of less than 500,000 population, or in an area not included in a standard metropolitan statistical area:

(a) Unconditional status - three or more dialysis stations with performance of an average of 4.0 or more dialyses per station per week.

(b) Conditional status - two dialysis stations with performance of an average of 4.0 or more dialyses per station per week.

Renal Dialysis Centers

The utilization standard for renal dialysis centers performing greater than 20 percent of their dialyses on outpatients:

(1) For any facility located within a standard metropolitan statistical area of 500,000 population or greater:

(a) Unconditional status - six or more dialysis stations with performance of an average of 4.5 or more dialyses per station per week.

(b) Conditional status - six or more dialysis stations with performance of an average of between 4.0 and 4.5 dialyses per station per week, or four or five dialysis stations with performance of an average of 4.5 or more dialyses per station per week.

(2) For any facility located in a standard metropolitan statistical area of less than 500,000 population, or in an area not included in a standard metropolitan statistical area:

(a) Unconditional status - three or more dialysis stations with performance of an average of 4.0 or more dialyses per station per week.

(b) Conditional status - two dialysis stations with performance of an average of 4.0 or more dialyses per station per week.

The utilization standard for renal dialysis centers performing 20 percent or less of their dialyses on outpatients:

(1) Unconditional status - three or more dialysis stations with performance of an average of 4.0 or more dialyses per station per week.

(2) Conditional status - two dialysis stations with performance of an average of 4.0 or more dialyses per station per week.

A total of 1,141 certified dialysis facilities have been classified by MUR criteria. This number is 13 less than the total number of approved dialysis facilities. The unclassified 13 facilities are RDCs which provide backup dialysis only, and new facilities that have not been assigned MUR status as yet.

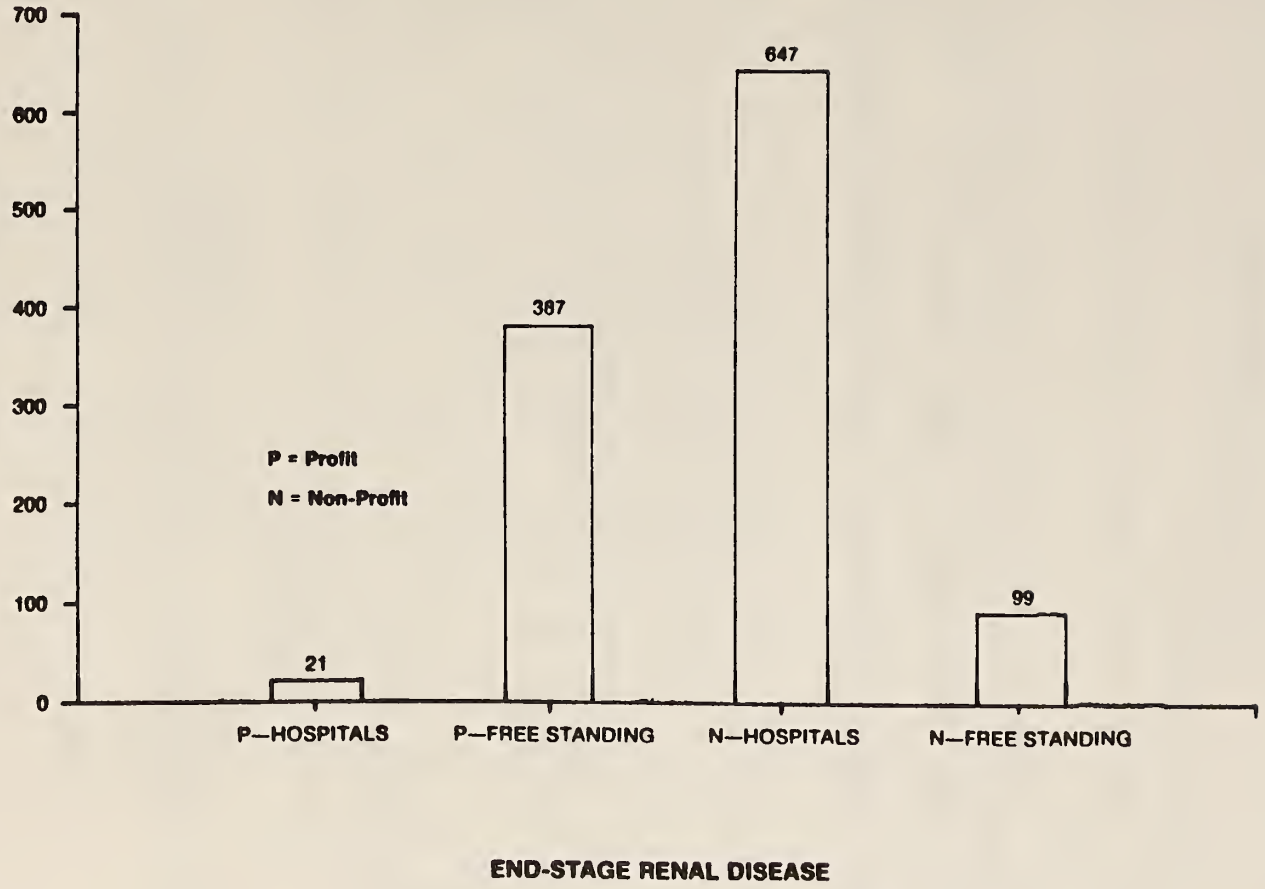
The following numbers of facilities have been classified according to the MUR criteria established in regulation:

TABLE 8. MINIMUM UTILIZATION RATE STATUS

	Total	Unconditional	Conditional	Exception	Undetermined
Renal Dialysis Center	561	492	52	11	6
Renal Dialysis Facility (Hospital-based)	107	85	17	2	3
Renal Dialysis Facility (Independent)	486	397	82	3	4
Total	1,154	974	151	16	13

The current MUR criteria are being reviewed. The assessment will evaluate the degree of correlation between the number of dialysis treatments and procedures performed, the quality of care patients receive, and the cost effectiveness of the treatments and procedures.

Figure 4
The Ownership
Profit VS. Non-Profit
1154 Providers of Dialysis



SOURCE: RENAL PROVIDER FILE, DECEMBER 1981 - HCFA

CHAPTER III. TRANSPLANTS

Material in this section responds to:

Section 1881(g)(4) "the number of kidney transplants by source of donor organ"

Section 1881(g)(5) "the number of patients awaiting organs for transplant"

Section 1881(g)(6) "the number of transplant failures"

Section 1881(g)(7) "the range of costs of kidney acquisitions, by type of facility and by region"

Section 1881(g)(8) "the number of facilities providing transplants and the number of transplants performed per facility"

A. SUMMARY OF ACTIVITY

During 1981, 4,885 kidney transplants were performed (see Table 10). This represents an increase of 188 transplants, or 4.0 percent, over the 4,697 transplants performed in 1980. The number of living related donor transplants in 1981 was 1,458, an increase of 183 (14.4 percent) such transplants over 1980. Cadaveric transplants, on the other hand, increased by only 0.2 percent, with 5 more such transplants being performed in 1981 than in 1980, or 3,427 in 1981 versus 3,422 in 1980 (see Table 9, and Figures 5 and 6).

TABLE 9. ANNUAL DISTRIBUTION OF KIDNEY TRANSPLANTS, BY SOURCE OF DONOR ORGAN

Calendar Year	Total Transplants	Living Donor		Cadaveric Donor	
1980	4,697	1,275	27.1%	3,422	72.9%
1981	4,885	1,458	29.8%	3,427	70.2%

B. PATIENTS AWAITING ORGANS

There are 5,773 persons awaiting transplant. Of this number, 5,593 are dialysis patients and 180 are not dialysis patients (see Table 11). Patients included in these counts must be medically able, have given consent, and be awaiting transplant at the reporting transplant center.

ESRD NETWORK DISTRIBUTION OF KIDNEY TRANSPLANTS BY SOURCE OF DONOR KIDNEY
TRANSPLANTS REPORTED IN CALENDAR 1981

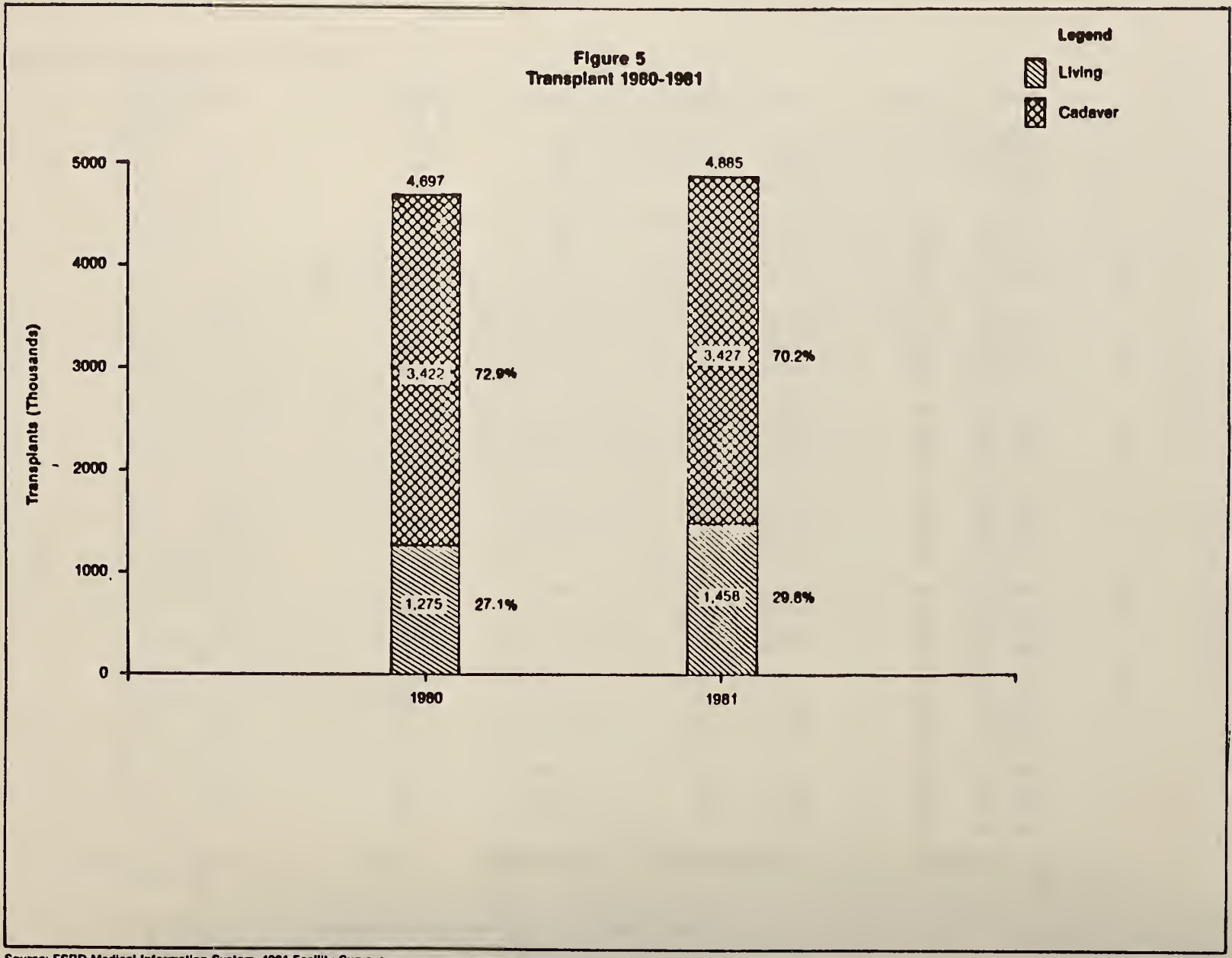
TABLE 10

ESRD NETWORK	FACILITIES SURVEYED	FACILITIES REPORTING	PEOPLE	TRANSPLANTS	LIVING RELATED		CADAVERIC	
1	1	1	12	12	3	25.0%	9	75.0%
2	5	5	163	163	68	41.7%	95	58.3%
3	3	3	241	241	79	32.8%	162	67.2%
4	11	11	306	307	74	24.1%	233	75.9%
5	2	2	76	77	31	40.3%	46	59.7%
6	5	5	70	70	35	50.0%	35	50.0%
7	3	3	250	250	117	46.8%	133	53.2%
8	2	2	106	106	12	11.3%	94	88.7%
9	8	8	183	183	53	29.0%	130	71.0%
10	5	5	64	64	28	43.8%	36	56.3%
11	8	8	296	296	86	29.1%	210	70.9%
12	5	5	80	80	22	27.5%	58	72.5%
13	2	2	170	170	61	35.9%	109	64.1%
14	10	10	268	268	77	28.7%	191	71.3%
15	7	7	186	186	62	33.3%	124	66.7%
16	3	3	72	72	30	41.7%	42	58.3%
17	6	6	134	135	31	23.0%	104	77.0%
18	4	4	278	278	100	36.0%	178	64.0%
19	4	4	164	165	64	38.8%	101	61.2%
20	5	5	83	83	31	37.3%	52	62.7%
21	5	5	107	107	23	21.5%	84	78.5%
22	6	6	312	312	51	16.3%	261	83.7%
23	5	5	103	103	21	20.4%	82	79.6%
24	7	7	182	182	65	35.7%	117	64.3%
25	6	6	286	289	58	20.1%	231	79.9%
26	6	6	145	145	37	25.5%	108	74.5%
27	2	2	47	47	22	46.8%	25	53.2%
28	9	9	216	216	72	33.3%	144	66.7%
29	1	1	16	16	15	93.8%	1	6.3%
30	4	4	86	86	3	3.5%	83	96.5%
31	3	3	87	87	16	18.4%	71	81.6%
32	3	3	89	89	11	12.4%	78	87.6%
TOTAL	156	156	4,878	4,885	1,458	29.8%	3,427	70.2%

PERCENTAGES MAY NOT ADD TO 100.0% DUE TO ROUNDING

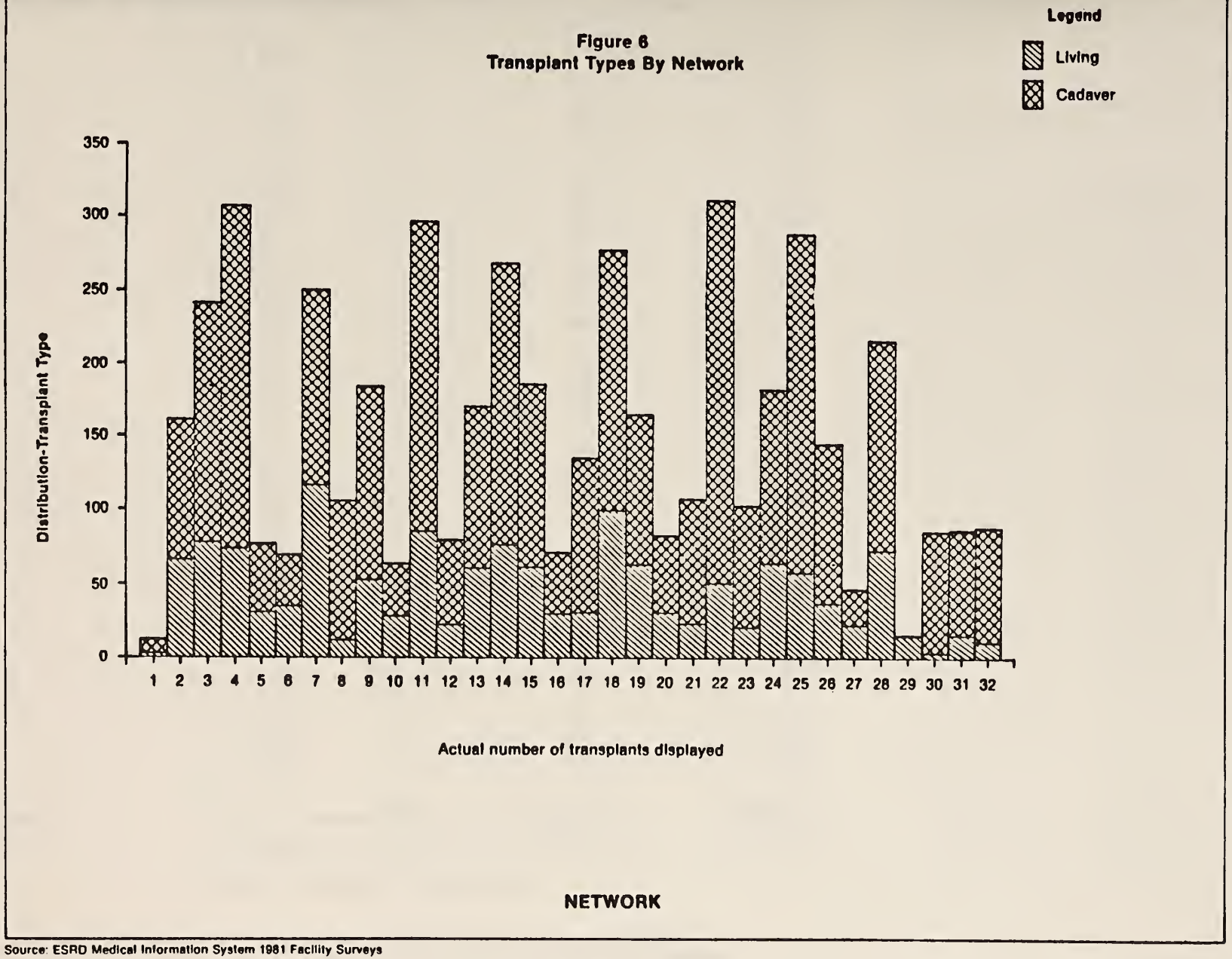
SOURCE: ESRD MEDICAL INFORMATION SYSTEM 1981 FACILITY SURVEYS.

Figure 5
Transplant 1980-1981



Source: ESRD Medical Information System, 1981 Facility Surveys

Figure 6
Transplant Types By Network



Source: ESRD Medical Information System 1981 Facility Surveys

TABLE 11

ESRD NETWORK COMPARISON
OF 1981 PATIENTS AWAITING TRANSPLANTS
TO 1981 AND 1980 TRANSPLANTS

PATIENTS AWAITING TRANSPLANTS

ESRD NETWORK	TRANSPLANT FACILITY		1981 TRANSPLANTS	1980 TRANSPLANTS
	DIALYSIS	NON-DIALYSIS		
1	79	1	12	12
2	51	1	163	133
3	579	0	241	255
4	287	7	307	272
5	9	0	77	104
6	75	4	70	55
7	239	23	250	234
8	89	2	106	131
9	222	7	183	156
10	105	8	64	72
11	297	0	296	254
12	110	4	80	110
13	192	25	170	179
14	181	6	268	186
15	258	11	186	174
16	151	5	72	77
17	143	1	135	157
18	215	2	278	257
19	293	10	165	163
20	183	4	83	103
21	129	4	107	88
22	281	23	312	265
23	75	0	103	90
24	145	4	182	175
25	347	15	289	260
26	229	6	145	145
27	53	0	47	53
28	262	3	216	226
29	10	0	16	18
30	118	3	86	117
31	47	1	87	94
32	139	0	89	82
TOTAL	5,593	180	4,885	4,697

SOURCE: ESRD MEDICAL INFORMATION SYSTEM 1980, 1981 FACILITY SURVEYS.

C. TRANSPLANT FAILURES

Although exact information on the number of transplant failures is not available, information collected by HCFA shows that 1,388 patients returned to dialysis from transplantation during 1981. This figure represents 28.4 percent of all patients transplanted in 1981. Comparable figures for 1980 are 1,398 patients, or 29 percent of all patients transplanted in 1980.

However, it is important to note that these figures do not present a complete picture of transplant failures. For example, it is impossible to tell from these figures how many years a transplanted graft functioned before failing, since patients returning to dialysis from transplantation in 1981 may have received their transplant several years earlier. Further, data collected from ESRD facilities does not capture transplant failures which resulted in death.

D. KIDNEY ACQUISITION COSTS

Kidney acquisition services are those services necessary to identify potential donors, maintain a registry of patients awaiting transplant, ensure suitability and compatibility of the selected donor and recipient, excise the donor kidney, transport the organ to the transplant hospital, and maintain the viability of the organ until the time of transplantation. The charges for these services are accumulated and billed to the Medicare program by the hospital which performs the transplant.

The information available on kidney acquisitions is charge data rather than actual cost information. Charge data are received as individual bills and are recorded when the bills are submitted to the intermediary. Cost data are not available until final settlement of each hospital's audited cost report for the fiscal year in question.

In order to determine kidney acquisition charges for 1981, the DHHS Regional Offices requested the intermediaries to provide their transplant hospitals' charges in effect as of December 31, 1981, for living related donor kidneys and cadaveric donor kidneys. This information was provided for 135 transplant hospitals. HCFA compiled the data and found that during 1981, the national average kidney acquisition charge for a living related donor kidney was $7,562, and for cadaveric donor kidneys it was $7,172. The range and average of kidney acquisition charges by DHHS Regions are shown in Tables 12A and 12B.

The intermediaries were also requested to report the percent of billed kidney acquisition charges that was paid to each transplant center receiving interim payments based on a percentage of billed charges. For those hospitals paid on some other basis, the intermediaries were requested to report the cost to charges ratio applicable to the kidney acquisition cost center from the three most recent years for which the ratio was available. HCFA received this information from 123 hospitals.

To convert charge data to costs, we multiplied the charge by either the applicable 3-year average cost to charge ratio or by the percent of billed kidney acquisition charges paid to the hospital. The calculations result in an average estimated national kidney acquisition cost for living related donor kidneys of $7,561, and for cadaveric donor kidneys the average estimated cost was $7125. The range and average of estimated kidney acquisition costs by DHHS Region are shown in Tables 13A and 13B.

It should be noted that the costs derived are based on the arithmetic mean, and are not weighted by the number of transplants performed in each hospital.

TABLE 12A

AVERAGE AND RANGE OF KIDNEY ACQUISITION CHARGES
LIVING RELATED DONOR KIDNEYS
FOR 1981, BY REGION

REGION	HIGH	LOW	AVERAGE
Boston	$12,500	$2,000	$6,284
New York	8,870	2,508	6,015
Philadelphia	13,545	4,491	7,888
Atlanta	13,000	2,600	7,744
Chicago	20,500	3,000	7,646
Dallas	14,000	1,500	5,382
Kansas City	14,250	4,200	9,562
Denver	7,592	7,000	7,296
San Francisco	12,650	2,250	8,307
Seattle	11,500	8,500	9,500
National	$20,500	$1,500	$7,562

SOURCE: MEDICARE FISCAL INTERMEDIARIES' REIMBURSEMENT FILES.

TABLE 12B

AVERAGE AND RANGE OF KIDNEY ACQUISITION CHARGES
CADAVERIC DONOR KIDNEYS
FOR 1981, BY REGION

REGION	HIGH	LOW	AVERAGE
Boston	$10,000	$1,950	$6,318
New York	8,870	1,500	4,665
Philadelphia	13,545	3,975	8,008
Atlanta	11,165	3,500	7,108
Chicago	18,000	2,500	7,229
Dallas	9,100	1,500	5,885
Kansas City	19,250	7,000	12,295
Denver	7,227	4,100	5,664
San Francisco	13,000	7,033	7,947
Seattle	6,900	6,000	6,600
National	$19,250	$1,500	$7,172

SOURCE: MEDICARE FISCAL INTERMEDIARIES' REIMBURSEMENT FILES.

TABLE 13A.

AVERAGE AND RANGE OF ESTIMATED KIDNEY ACQUISITION COSTS
LIVING RELATED DONOR KIDNEYS
FOR 1981, BY REGION

REGION	HIGH	LOW	AVERAGE
Boston	$10,625	$1,800	$5,275
New York	20,622	2,390	8,611
Philadelphia	20,752	3,236	7,554
Atlanta	18,087	2,600	8,529
Chicago	17,630	2,637	7,042
Dallas	11,060	1,620	4,938
Kansas City	11,880	4,200	8,459
Denver	10,045	6,430	8,238
San Francisco	16,700	2,295	8,522
Seattle	8,721	8,200	8,445
National	$20,752	$1,620	$7,561

SOURCE: MEDICARE FISCAL INTERMEDIARIES' REIMBURSEMENT FILES.

TABLE 13B.
AVERAGE AND RANGE OF ESTIMATED KIDNEY ACQUISITION COSTS
CADAVERIC DONOR KIDNEYS
FOR 1981, BY REGION

REGION	HIGH	LOW	AVERAGE
Boston	$ 9,000	$1,365	$5,243
New York	20,622	1,500	7,748
Philadelphia	20,752	3,128	7,625
Atlanta	15,480	3,143	7,805
Chicago	15,480	2,505	6,683
Dallas	9,000	1,500	4,687
Kansas City	15,978	5,740	10,914
Denver	6,121	5,884	6,003
San Francisco	15,600	3,392	8,478
Seattle	7,079	4,278	6,063
National	$20,752	$1,365	$7,125

SOURCE: MEDICARE FISCAL INTERMEDIARIES' REIMBURSEMENT FILES.

Independent Organ Procurement Agencies

Some kidney acquisition services are performed for hospitals by independent organ procurement agencies (OPAs). The services provided differ among OPAs, and range from providing only placement services, to providing all services except medical evaluation of the recipient or any living donors. The costs incurred by an OPA are billed to the transplant hospital and become a component of the hospital's kidney acquisition cost.

Independent OPAs are reimbursed on a cost basis. There are 26 operational OPAs which submitted cost reports during 1981. The cost per kidney for these OPAs ranged from $859 to $17,726. These figures are cost figures and as such are subject to adjustment on final cost settlement. The cost per kidney varies widely because of the variation in the number of kidney acquisition services performed by the individual OPAs. The data for OPAs was not broken down by type of kidney donor.

Table 14 shows the cost per kidney reported by the OPAs in each of the 10 DHHS Regions. One of the OPAs has been excluded from consideration because it is an umbrella organization, and its member OPAs are included in the data display.

TABLE 14.
KIDNEY ACQUISITION COSTS REPORTED BY INDEPENDENT ORGAN PROCUREMENT AGENCIES
BY REGION

REGION	COST PER KIDNEY
Boston	$8,033
New York	859*
	5,250
Philadelphia	7,102
	5,820
	1,266*
Atlanta	6,100
	11,825
	11,587
	4,082
	8,021**
	12,798**
Chicago	6,490
	7,861
	7,568
Dallas	6,847
	6,685
	6,037
	17,726**
Kansas City	9,866
	7,125
	5,167
Denver	0 (no activity)
San Francisco	1,970*
Seattle	7,481

*Limited Service OPAs
**First Year of Activity

SOURCE: MEDICARE FISCAL INTERMEDIARIES' REIMBURSEMENT FILES.

E. FACILITIES

As of December 31, 1981, there were 156 hospitals approved by the ESRD program as transplant centers.

Transplant centers are grouped according to the minimum utilization rate (MUR) certification standards (see Table 15). To achieve unconditional certification, a hospital must perform 15 or more transplants per year; for conditional certification, a hospital must perform 7-14 transplants per year; for exception certification, a hospital must perform less than seven transplants per year. One view is that transplantation success is more predictable at centers performing large numbers of procedures. Exception certification is granted only when requiring a higher level of performance would adversely affect ESRD program objectives, such as when a pediatric transplant center has low utilization.

TABLE 15. MINIMUM UTILIZATION RATE STATUS

	Total	Unconditional	Conditional	Exception	Undetermined
Transplant Center	156	114	34	1	7

The table below shows the range of the numbers of transplants performed, as reported by the hospitals, for 1981. For complete information on the number of transplants performed in each hospital, see Appendix D.

TABLE 16. RANGE OF THE NUMBERS OF TRANSPLANTS PERFORMED FOR 1981

Range of Number of Transplants Performed	Number of Centers	Percent	Accumulated Percent
0-6	13	8.3	8.3
7-14	29	18.6	26.9
15-24	40	25.6	52.6
25-49	51	32.7	85.3
50 or more	23	14.7	100.0

CHAPTER IV. MORTALITY AND MORBIDITY

Material in this section responds to:

Section 1881(g)(9) "patient mortality and morbidity rates"

A. ESRD PROGRAM SURVIVAL ANALYSIS

This section describes the program experience with respect to patient survival from onset of renal failure. The analysis covers the period from July 1973 through December 1979, a 6 1/2 year time period. All persons with renal failure occurring after June 30, 1973 and before January 1, 1980 who were Medicare entitled were included in the analysis. The total number of persons included in the computation of survival rates was 86,811.

Data

Computation of survival rates requires a date of renal onset and a date of death. Dates of death were taken from the Master Beneficiary Records which are maintained for all Medicare beneficiaries. The determination of renal failure onset was defined as the date of first dialysis or transplant and was taken from the patient history questionnaire (HCFA-2742), transplant form (HCFA-600), outpatient dialysis record (HCFA-2743), or from the Medicare entitlement records.

Survival rates were calculated using a standard modified life-table analysis. For each interval (each successive year following renal onset), the number of deaths occurring during the interval was divided by the number of persons alive at the beginning of the interval to obtain the survival rate. The cumulative survival rate is simply the product of successive yearly survival rates.

Results

Table 17 presents the results of the survival analysis for all Medicare persons with ESRD. Eighty-five percent of all persons survive for one year after onset of kidney failure. The probability of survival shows a slight upward trend with each succeeding year of survival. Persons initially have an 85 percent survival rate for one year. For persons who have survived two years, the probability of surviving an additional year is 88 percent. For those surviving five years, the probability of surviving through the sixth year is 90 percent.

Figure 7 is a graphic representation of the cumulative survival for this population. The net effect of yearly survival rates of 85 percent to 91 percent is a rapidly declining cohort. Less than three-fourths (72 percent) of ESRD patients can be expected to survive for two years. By the end of five years, slightly more than one-half (51 percent) of all patients will still be alive. By the end of 6 1/2 years, only 44 percent of the original cohort of ESRD beneficiaries can be expected to survive.

One of the strongest determinants of survival among ESRD Medicare beneficiaries is the age of the beneficiary at renal onset. Table 18 shows the year to year survival probabilities of ESRD beneficiaries by age at onset. For the younger age groups (0-14, 15-24, and 25-34), the first year survival rates are 90 percent or slightly higher. The survival rates in subsequent years remain in the mid 90 percent range. The next three age groups (35-44, 45-54, and 55-64) have year to year survival probabilities in the mid 80 percent range to the low 90 percent range. For the age group 65-74, first year survival is 74 percent. The year to year survival increases slightly to the extent that survival from the fifth to sixth years is 81 percent. The oldest age group (75 and over) has the poorest survival rates. The year to year survival rates range from 65 percent in the first year to 90 percent in the fifth to sixth year.

The cumulative effect of different survival rates is presented in Table 19 and illustrated in Figure 8. By the end of the 6 1/2 year time period included in this analysis, the figures show that 75 percent of the 0-14 age group can be expected to survive. This cumulative survival rate decreases steadily for each older age group. For the age group over age 75, less than 20 percent can be expected to survive 6 1/2 years. Thus, relative to other persons with ESRD, persons age 0-14 and 15-24 have the highest survival rates.

Despite these findings, relative to other persons their own age without renal failure, the younger age groups' survival experience is much worse. Table 20 shows the death rates over a five year period by age for the ESRD population and for the entire U.S. population. Among the general U.S. population under age 35, death is a rare event. Less than one percent of persons in these age groups can be expected to die over a five-year period. By contrast, 23 percent to 33 percent of persons with ESRD in the three youngest age groups can be expected to die over a five-year period. Thus, the excess mortality of ESRD persons in these age groups is quite high. The mortality rate for ESRD persons in the youngest three age groups is 40 to 47 times as great as all persons of the same age. This relative mortality decreases for the older groups. Thus, while the oldest age group of ESRD beneficiaries (75 and over) has a mortality rate of 79 percent over 5 years, this is only three times as great as the mortality rate for all persons in this age group.

This analysis indicates that while the younger ESRD beneficiaries have good survival rates relative to older ESRD beneficiaries, their survival is still far below that of the non-renal U.S. population.

TABLE 17. Cumulative Survival and Year to Year Survival of ESRD Beneficiaries, 1973 to 1979

Year	Cumulative Survival	Percent Surviving from Previous Year
1	85%	85%
2	72%	85%
3	63%	88%
4	56%	89%
5	51%	91%
6	46%	90%
6 1/2	44%	--

SOURCE: OFFICE OF RESEARCH AND BUREAU OF DATA MANAGEMENT AND STRATEGY, HCFA.

TABLE 18 Year to Year Survival Rates of ESRD Beneficiaries, by Age at Renal Failure Onset

Year	0-14	15-24	25-34	35-44	45-54	55-64	65-74	75+
1	92%	94%	91%	89%	87%	84%	74%	65%
2	93%	93%	89%	88%	86%	83%	76%	71%
3	97%	94%	93%	90%	87%	84%	77%	74%
4	96%	96%	93%	91%	89%	85%	79%	79%
5	96%	96%	96%	94%	88%	88%	76%	78%
6	97%	97%	94%	92%	90%	89%	81%	90%

SOURCE: OFFICE OF RESEARCH AND BUREAU OF DATA MANAGEMENT AND STRATEGY, HCFA.

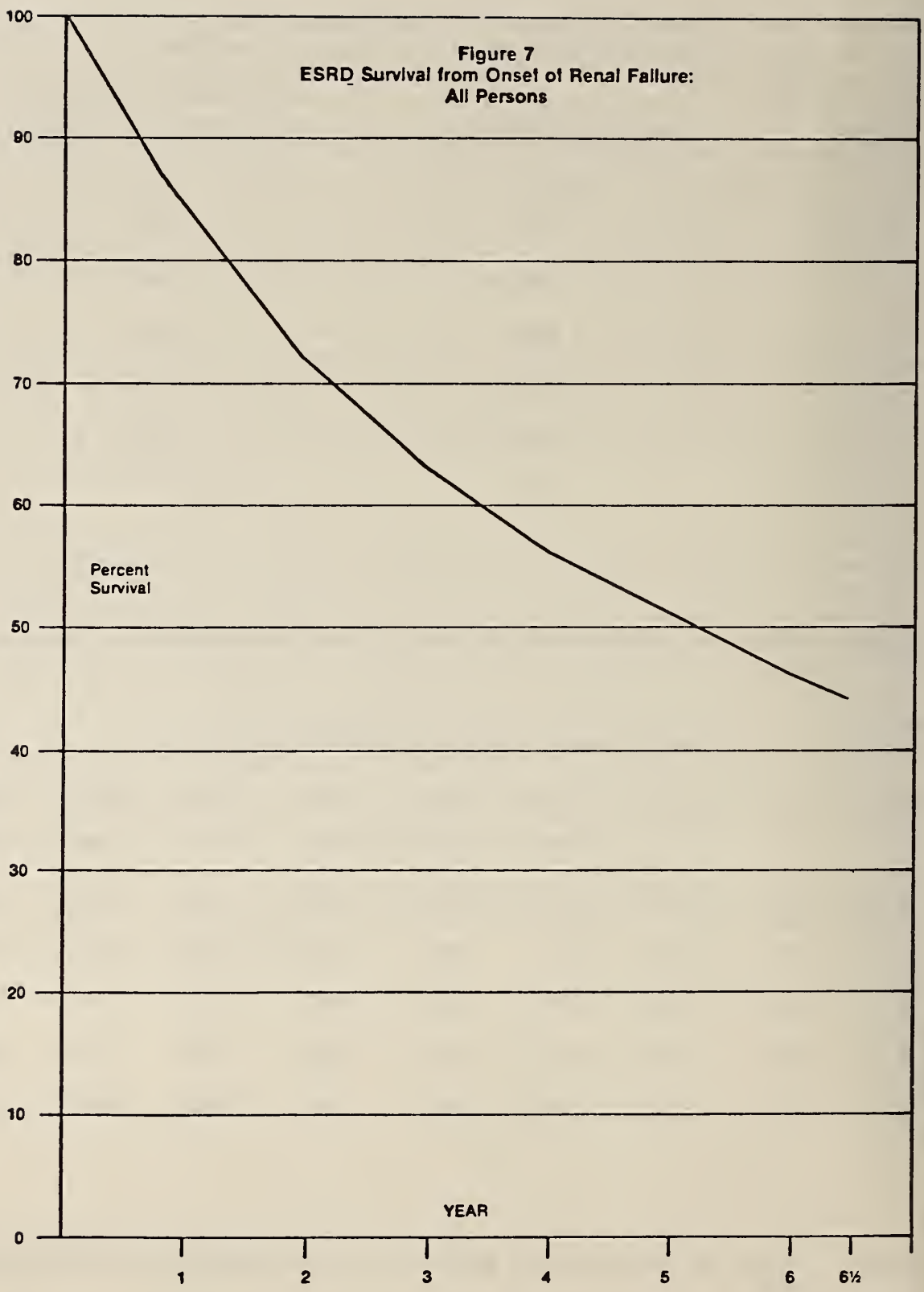


Figure 7
ESRD Survival from Onset of Renal Failure:
All Persons
100
90
80
70
60
50
40
30
20
10
0
Percent
Survival
YEAR
1
2
3
4
5
6
6½

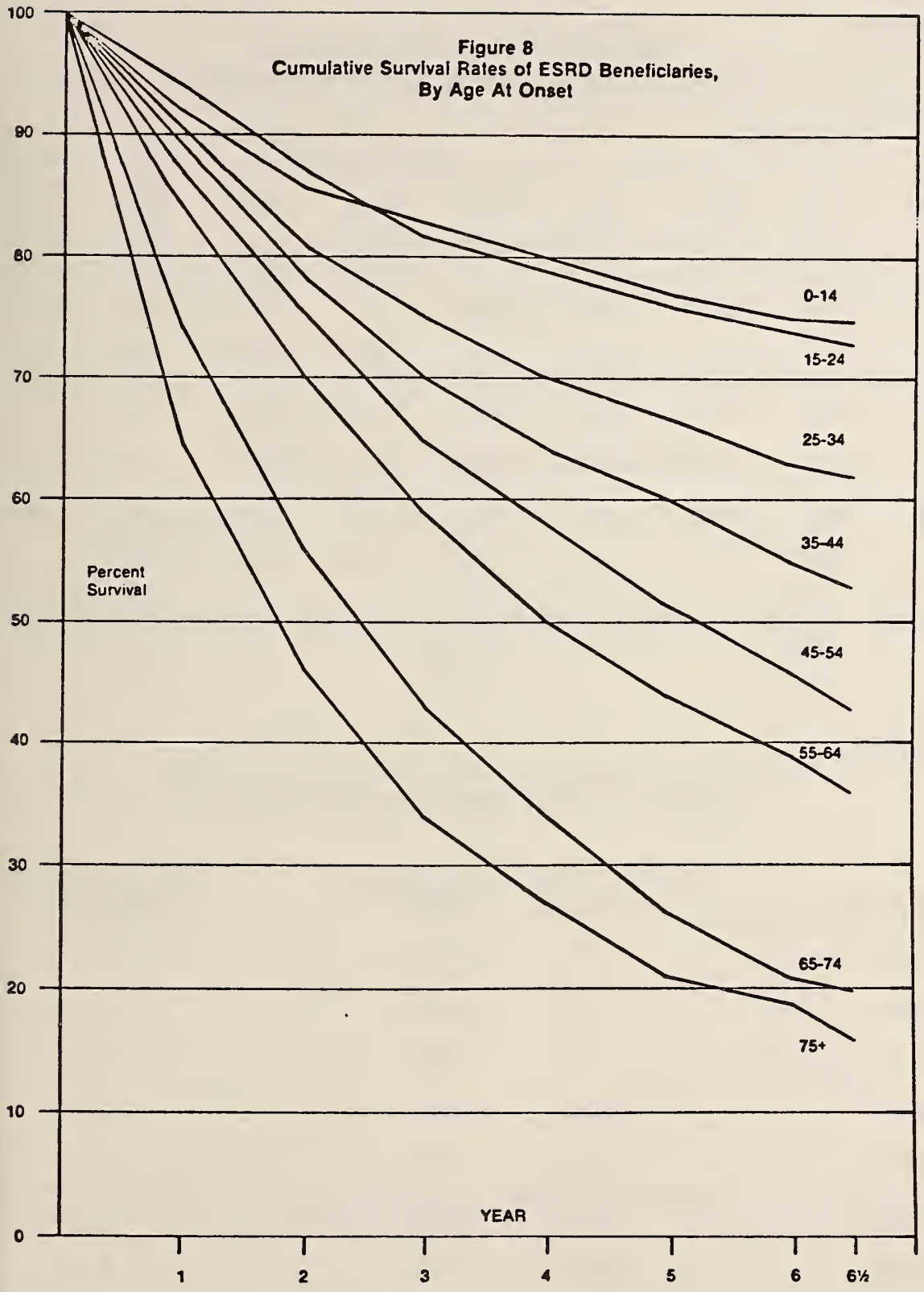


Figure 8
Cumulative Survival Rates of ESRD Beneficiaries,
By Age At Onset
100
90
80
70
60
50
40
30
20
10
0
Percent
Survival
0-14
15-24
25-34
35-44
45-54
55-64
65-74
75+
YEAR
1
2
3
4
5
6
6½

TABLE 19.

Cumulative Survival Rates of ESRD Beneficiaries, by Age at Renal Failure Onset

	Age at Onset							
Year	0-14	15-24	25-34	35-44	45-54	55-64	65-74	75+
1	92%	94%	91%	89%	87%	84%	74%	65%
2	86%	87%	81%	78%	75%	70%	56%	46%
3	83%	82%	75%	70%	65%	59%	43%	34%
4	80%	79%	70%	64%	58%	50%	34%	27%
5	77%	76%	67%	60%	51%	44%	26%	21%
6	75%	74%	63%	55%	46%	39%	21%	19%
6 1/2	75%	73%	62%	53%	43%	36%	20%	16%

SOURCE: OFFICE OF RESEARCH AND BUREAU OF DATA MANAGEMENT AND STRATEGY, HCFA.

TABLE 20.

Five-Year Mortality Rates for the U.S. Population and for Medicare ESRD Beneficiaries, by Age

Age Group	Percent Dying in Five Years		Excess Mortality
	Total U.S.	ESRD	ESRD/U.S.
0-14	.5%	23%	46
15-24	.6%	24%	40
25-34	.7%	33%	47
35-44	1.3%	40%	31
45-54	3.1%	49%	16
55-64	7.2%	56%	8
65-74	14.8%	74%	5
75+	31.1%	79%	3

SOURCE: OFFICE OF RESEARCH AND BUREAU OF DATA MANAGEMENT AND STRATEGY, HCFA.

B. INPATIENT UTILIZATION

The number of inpatient hospital admissions and the days of inpatient care utilized can be used as an indicator of the relative success of medical management of patients with end-stage renal disease. Since the data include admissions for all reasons, they are not a specific measure of renal morbidity, but they are a rough measure of overall health.

The data were gathered from hospital bills posted as of March 23, 1982. Excluded from the tables are data on individuals who were still patients as of January 1, 1982; that is, the tables reflect data only from patients whose inpatient stay ended on or before December 31, 1981.

Table 21 shows the number of patients requiring hospitalization and the number of admissions required by those patients.

TABLE 21. PATIENTS BY NUMBER OF ADMISSIONS

1980*

Admissions	Patients	Distribution
1	17,221	42.0%
2	10,205	24.9%
3	6,016	14.7%
4	3,508	8.5%
5+	4,050	9.9%

Total Patients -- 41,000

1981

Admissions	Patients	Distribution
1	18,074	48.1%
2	9,587	25.5%
3	4,990	13.3%
4	2,547	6.8%
5+	2,360	6.3%

Total Patients -- 37,558

*These figures differ from the ones reported earlier in the 1980 ESRD Annual Report to Congress due to the lag in reporting.

SOURCE: ESRD MEDICAL INFORMATION SYSTEM.

The largest increase in patients hospitalized from 1980 to 1981 was distributed within the group of patients requiring one admission, from 42.0 percent to 48.1 percent. In 1980, 18.4 percent of the patients required four or more admissions, while in 1981, only 13.1 percent of the patients required four or more admissions.

The following table shows the total days of inpatient care, for renal and nonrenal conditions, utilized by ESRD patients and the average length of stay.

TABLE 22. INPATIENT DAYS OF CARE UTILIZED

	Patients Discharged		Patients Deceased	
	Total Days of Care	Average Length of Care	Total Days of Care	Average Length of Stay
1980*	988,448	11	95,417	21
1981	729,543	10	60,654	18

*These figures differ from the ones reported for calendar year 1980 in the 1980 ESRD Annual Report to Congress due to the lag in reporting.

SOURCE: ESRD MEDICAL INFORMATION SYSTEM.

The length of stay remained constant at 11 days for patients discharged and 21 days for patients deceased for 1979 and 1980. While the 1981 data show only 10 days and 18 days, respectively, experience indicates that once the lag in reporting is posted, these numbers will probably increase to remain constant at 11 days for discharged patients and 21 days for deceased patients, as in prior years.

CHAPTER V. COSTS

Material in this section responds to:

Section 1881(g)(10) "the average annual cost of hospitalization for ancillary problems in dialysis and transplant patients, and drug costs for transplant patients"

Section 1881(g)(11) "Medicare payment rates for dialysis, transplant procedures and physician services along with any changes in such rates during the year and reasons for those changes"

Section 1881(g)(15) "estimated program costs over the next five years".

A. HOSPITALIZATION FOR ANCILLARY PROBLEMS

For the purposes of this report, ancillary hospitalizations were defined as all hospitalizations other than transplants. This is a necessary simplification because many hospitalizations are related to the transplant event, either before the actual transplant or afterward, such as rejection episodes. However, it is not possible to completely identify which hospital stays are transplant "related".

Data

The basic data were taken from the 1979 MEDPAR, Medicare Provider Analysis and Review File, which is a random 20 percent sample of all inpatient discharges and includes diagnostic and procedure coding. This sample of stays includes procedure coding so it was possible to determine average charges and length of stay for transplant and nontransplant stays. However, at the time of this analysis, the 1979 MEDPAR file was only 93.7 percent complete; thus, national projections of total costs would be somewhat short. Therefore, the charge per discharge figures and the average length of stay figures were adjusted upward to correct for the shortfall.

Finally, program costs in the form of actual Medicare reimbursements were calculated by taking the national Medicare reimbursement to charges ratio and applying it to these discharges.

Results

Table 23 summarizes the results of this analysis. In 1979, Medicare ESRD patients had a total of 82,923 discharges. Of the total discharges, 61 percent were nonsurgical, 34 percent included a surgical procedure other than transplant, and the remaining 5 percent were for transplants.

Inpatient charges amount to over $363 million for this population. Because of the relatively high cost of transplant stays, almost one-fourth (23 percent) of all inpatient charges were for transplant stays. Overall, the average charge per stay for

the ESRD population in 1979 was $4,372. The average transplant stay had a charge of $21,866, while the average ancillary (i.e., nontransplant) hospital stay had a charge of $3,527. Of the total ancillary stays, the average charge for nonsurgical stays was $2,772 and the average charge for surgical stays was $4,882. For the nonrenal Medicare population, charges per stay in 1979 were $2,091 for nonsurgical stays and $3,623 for surgical stays.

Medicare reimbursements are not equal to hospital charges. Applying the national ratio of Medicare reimbursements to charges gives an estimate of the costs to Medicare for ESRD hospitalizations. For all ESRD patients, estimated Medicare inpatient hospital payments were $258 million; $59 million were for transplants and $199 million for nontransplant (or ancillary) stays.

As noted earlier, nonsurgical stays comprised 61 percent of all stays while the nontransplant surgical stays were 34 percent of the total. However, reimbursements for the nontransplant stays were almost equally divided between nonsurgical and surgical stays. The estimated Medicare reimbursements per stay are $3,113 for all discharges, $15,568 for transplants and $2,519 for all nontransplant stays.

The average length of stay (covered days only) also shows marked differences by type of stay. For all stays, the average length of stay was 9.5 days. For transplants, the average length of stay was 29.6 days, and for all nontransplant stays, the average length of stay was 8.9 days.

TABLE 23.

CHARGES, ESTIMATED REIMBURSEMENTS AND AVERAGE LENGTH OF STAY FOR TRANSPLANTS AND NON-TRANSPLANT HOSPITAL STAYS

	Stays	Transplants	Non-Transplants		
			All	Non-Surgical	Surgical
Number of Stays	82,923	3,775	79,148	50,434	28,714
Percent	100%	5%	95%	61%	34%
Charges (in 1,000's)	$362,539	$82,544	$279,995	$139,803	$140,192
Percent	100%	23%	77%	38%	39%
Charges per stay	$ 4,372	$21,866	$ 3,527	$ 2,772	$ 4,882
Estimated Reimbursement (1,000's)	$258,128	$58,771	$199,356	$ 99,540	$ 99,817
Estimated Reimbursement per stay	$ 3,113	$15,568	$ 2,519	$ 1,974	$ 3,476
Covered Days	787,750	111,802	675,948	363,270	312,678
Percent	100%	14%	86%	46%	40%
Average length of stay (covered days)	9.5	29.6	8.9	7.2	11.9

SOURCE: 1979 MEDPAR 20 PERCENT SAMPLE OF HOSPITAL STAYS.

B. DRUG COSTS FOR TRANSPLANT PATIENTS

Outpatient drugs are not covered under the Medicare program, and while drugs for inhospital patients are covered, inpatient drug costs for transplant patients are not available in any Medicare files.

HCFA attempted to solicit voluntary participation by the transplant community in a study of drug costs for transplant patients, and was informed that since drug costs are irrelevant to graft outcome and cost containment, there is no real incentive to study or accumulate this information. Moreover, most facilities do not keep outpatient prescription costs, since the patients are responsible for obtaining their own prescription drugs.

C. DIALYSIS PAYMENT RATES

While data are incomplete, the average payment rate for maintenance dialysis in 1981 is estimated to be $152 per treatment (includes all approved reimbursement exception requests). This payment rate reflects the combined weighted average of the payment to each of the two types of ESRD facilities: hospital-based and nonhospital (freestanding). Hospital-based facilities are paid the lesser of their cost or a national payment screen. Their average final reimbursement rate in 1981 is estimated to be $166 per treatment (exclusive of physicians services). Freestanding facilities are paid the lesser of their charge or a national payment screen. Their average payment (exclusive of physicians services) is estimated to be $138 per treatment.

D. TRANSPLANT PROCEDURES

To compute the expenditures for transplant procedures, we took the estimated 1979 reimbursement per stay for transplants of $15,568 derived in the study reported in the "Hospitalization for Ancillary Problems" section of this report, and applied the inflation factors for Inpatient Expense per Admission, as reported in Table B-2 of "Health Care Financing Trends--Summer 1981", HCFA. In this publication, the inflation factor for 1980 was 10.6 percent, and for 1981, it was 13.1 percent. The resulting cost for a 1981 transplant procedure was $19,473.79, excluding physicians' services but including the kidney acquisition cost.

E. PHYSICIAN SERVICES

The payment rates for physician services can be categorized by the type of treatment the patient receives, either dialysis or transplant.

Dialysis

In FY 1981, dialysis physicians were reimbursed under one of two methods--the initial method or the alternative method. Under the initial method, physicians receive payment for their supervisory dialysis services directly from the facility, usually under a salary or contract arrangement. Other services required by the patient (not considered routine) are billed to the Medicare program by the physician on a fee-for-service basis.

Under the initial method, the average payment rate to physicians for supervisory services during dialysis is part of the overall dialysis charge billed by the facility. Under the alternative reimbursement method, physicians are paid a monthly fee for each patient for all renal care of that patient. This includes supervisory services during dialysis, plus all other renal related services, complicated or routine, furnished during a particular month.

The alternative monthly allowances for physician services to patients dialyzing in a facility ranged from a minimum level of $180 to a maximum level of $260. The allowances for physician services for treatment of patients dialyzing in the home ranged from a minimum level of $126 to a maximum level of $182. The lower payment rates for home dialysis are due to the fewer services rendered to home dialysis patients.

Physician payments are subject to the Supplementary Medical Insurance (Part B) coinsurance, and, thus, Medicare reimbursement is made for 80 percent of the allowed charge.

Transplant

The rules used to determine payment for physicians' renal transplantation services are different from the regular Medicare reasonable charge methodology used to determine payment for physicians' services. Under the regular methodology, the carrier determines the customary charge (generally the charge most frequently made) by each physician for each separate service furnished to patients in the previous calendar year. The carrier determines the prevailing charge for each covered service. The prevailing charge is the amount which is high enough to cover the customary charges in three out of every four bills submitted in the previous year for each service. Increases in prevailing charges for physicians' services are limited from year to year by an "economic index" formula which relates physicians' fee increases to the actual increases in the cost of maintaining their practices and to raises in general earnings levels.

When a medical insurance claim is submitted, the carrier compares the actual charge shown on the claim with the customary and prevailing charges for that service. The charge approved by the carrier will be either the customary charge, the prevailing charge, or the actual charge, whichever is the lowest.

With respect to renal transplantation services, a comprehensive payment is made for all of the surgeons' services including the usual pre- and post-operative surgical care, and for immunosuppressant therapy, when supervised by the attending transplant surgeon, for a period of 60 days. Additional amounts established on the basis of program experience may be included for other surgery performed concurrently with the transplant operation, such as a splenectomy, nephrectomy, or a combination of all of these.

The comprehensive payments are revised July 1 of each year to the extent permitted by the lesser of: (1) changes in the economic index, or (2) changes from one year to the next in the prevailing charges for a unilateral nephrectomy.

The maximum allowances for the transplantation services range from $2,389.90 to $3,309.10 depending on the extent of the services provided by the physicians. These amounts included an increase of 7.96 percent in 1981 to reflect an increase in the economic index.

F. PROJECTED ENROLLMENT AND BENEFIT PAYMENTS FOR THE END-STAGE RENAL DISEASE PROGRAM UNDER CURRENT LAW

Medicare enrollment for persons with ESRD is projected to increase from 77,000 in FY 1983 to about 90,000 by FY 1987. Medicare benefit payments for these persons are projected to increase from $2.0 billion to about $3.1 billion for the same period of time. The year-to-year changes are the result of the interaction of two factors: (1) increases in the population, including changes in the mix of treatment modes, and (2) increases in the cost of services provided. The table below shows the projected enrollment and benefit payments on a cash basis through FY 1987. These are current law projections and do not reflect the effects of the proposed ESRD regulations (i.e., the dual-composite rate regulation and the ESRD second payer regulation).

TABLE 24.

ESTIMATED ENROLLMENT AND AGGREGATE BENEFIT PAYMENTS ON A CASH BASIS
TOTAL ESRD MEDICARE PROGRAM

Fiscal Year	Average Annual Enrollment (thousands)	Total Benefit Payments (Millions)
1983	76.8	$2,019
1984	80.5	2,270
1985	83.7	2,527
1986	86.7	2,787
1987	89.4	3,052

SOURCE: OFFICE OF FINANCIAL AND ACTUARIAL ANALYSIS, HCFA.

CHAPTER VI. EXPERIMENTS, RESEARCH AND NETWORK ACTIVITIES

Material in this section responds to:

Section 1881(g)(12) "the results of cost savings experiments"

Section 1881(g)(13) "the results of basic kidney disease research conducted by the Federal Government, private institutions, and foreign governments"

Section 1881(g)(14) "information on the activities of medical review boards and other Network organizations".

A. COST SAVINGS AND OTHER ESRD EXPERIMENTS

The Office of Research and Demonstrations within the Health Care Financing Administration is currently engaged in ten specific projects related to the End-Stage Renal Disease (ESRD) Program. Three of these studies correspond to specific mandates in Public Law 95-292. Two of these Congressionally mandated studies are being performed as intramural studies within the Office of Research, while the other two mandated studies are being conducted under contracting arrangements. The remaining six studies are classified as Departmental/Agency HHS/HCFA initiatives and address many of the basic policy, program evaluation and cost containment issues involved in administering the ESRD program. Four of the Departmental initiatives are sponsored under HCFA's Discretionary Grants Program and the other two by intramural staff studies.

A list of research and demonstration studies which are described in the following pages and which are in various stages of completion include:

MANDATED STUDIES

1. A set of demonstration projects that involves the reimbursement of home dialysis aides to encourage more patients to dialyze at home.

2. A study of the size and financial impact on the non-Medicare eligible ESRD patient population.

3. A study of the effectiveness of the independent organ procurement agencies and methods of increasing public participation in kidney donation programs.

4. A study of physician practices and reimbursement policies for the delivery of renal services.

HHS/HCFA INITIATED STUDIES

1. A study of the impact of alternative types of therapy on the quality of life, quality of care, cost of care, and the rehabilitation potential of ESRD patients.

2. A study of cost outcomes and competition in the ESRD program.

3. A study of the impact that case-mix and facility characteristics such as organizational auspices and staffing patterns have on treatment costs, utilization of services, and assignment to treatment modalities.

4. A statistical modelling study of the ESRD delivery care system that is designed to assist in the preparation of enrollment and cost projections for the ESRD program under different planning assumptions.

5. A statistical analysis of the ESRD program's administrative records which pertain to program entitlement, utilization of services, reimbursement, and patient survival statistics.

6. The ESRD Program Research and Evaluation Plan.

HOME DIALYSIS AIDE EXPERIMENTS

HCFA has sponsored three demonstrations which changed ESRD benefits by extending coverage to the services of a dialysis aide for maintenance dialysis sessions performed in the patient's home. The primary purpose was to test whether or not providing this extra benefit resulted in more patients choosing home dialysis as a treatment option. In addition, the impact on cost and quality of care were documented for analysis.

Two categories of paid aides were covered under the demonstrations. The first, known as "partners," were family or household members. The second, known as "assistants," were non-family or household members who could qualify to perform the patient aide service. A three-year program was instituted whereby home patients and their aides could join the demonstration. Payment for services included training, transportation, and maintenance dialysis performance sessions. Partners and assistants received payment for the above services; however, partners received one-half the amount specified for assistants. Now that the three-year demonstration period is completed, no new patients will be accepted into the demonstration. However, for those that have enrolled, the benefits will continue through mid-1987.

The three contractors which were chosen to design and implement these demonstration projects were System Sciences, Inc., Research Triangle Institute, and the University of Utah. The System Sciences demonstration began on April 1, 1978; it involves the participation of eight experimental facilities located in six different states: New York, Massachusetts, Mississippi, Florida, Minnesota, and California.

The Research Triangle Institute demonstration began on October 1, 1978; it involves the participation of 10 dialysis facilities located in North Carolina. The University of Utah demonstration began July 1, 1978; it involves the participation of eight experimental facilities located in Utah and Colorado.

Prior to these demonstrations, there was a decreasing trend in the proportion of patients using home dialysis. Results thus far show increases at the experimental sites in the percentage of patients choosing the home environment. The Research Triangle experience reported that home patients increased by 45 percent in North Carolina and by 25 percent in Tennessee (the control state). In the System Sciences demonstration, 43 percent of the new patients in the demonstration facilities chose to use the home environment, whereas only 16 percent of the new patients in facilities not paying for home aides elected the home option for maintenance dialysis. In the Utah project, preliminary figures indicate an increase in the proportion of home users of 6 percent. Of all new patients in this demonstration, 41 percent chose the home environment compared to 29 percent in the control group.

The results of all three demonstration projects are being independently evaluated by the Orkand Corporation under a separate contract awarded in September 1979. Orkand's evaluation will focus on three main issues: (1) whether the availability of paid home dialysis aides increases the number of ESRD patients who choose to dialyze at home; (2) whether paid aides are cost effective to the Medicare program, and (3) whether paid home dialysis aides can be provided without adversely affecting the quality of care received by ESRD beneficiaries.

Preliminary cost data has been analyzed from two-thirds of the demonstration facilities. A summary of key dialysis cost findings are as follows:

- Incenter Maintenance Dialysis - $150.74 Average Cost Per Treatment
- Home Dialysis - $93.59 Average Cost Per Treatment Without Aides
- Home Dialysis - $107.50 Average Cost Per Treatment With Aides

A STUDY OF THE SIZE AND FINANCIAL IMPACT OF THE NON-MEDICARE ELIGIBLE ESRD PATIENT POPULATION

HCFA, in cooperation with renal dialysis and transplant centers, is conducting an intramural study of the patients with end-stage renal disease who are not covered by Medicare. The study focuses on determining the number of non-entitled ESRD patients and the burden of their treatment costs. Data on person counts and total dollars billed are being collected on both center and home dialysis patients by primary source of support, which includes Veterans Administration, Medicaid, State ESRD programs, Blue Cross, and self-support. Information on the number of non-entitled transplant patients is also being collected. The intent of this Congressionally mandated study is to estimate the cost to the Federal Government if Medicare coverage were extended to this population.

A report, based on the results of the facility questionnaire, will be prepared containing descriptive data on: (1) the number of unentitled patients on dialysis by treatment setting and by primary source of support; and (2) the aggregate billing amounts for unentitled patients on dialysis by treatment modality and primary source of payment.

DEVELOP METHODS FOR INCREASING PUBLIC PARTICIPATION IN KIDNEY DONATION PROGRAMS

In October 1981, Brandeis University Health Policy Consortium began a study of the Independent Organ Procurement Agencies (OPAs). The purpose of this HCFA-sponsored grant is to study the operational efficiency of these agencies and to measure their effectiveness in obtaining and distributing kidneys. The importance of effective procurement of kidneys is essential to bring the current imbalance between consumer demand for transplants and the number of transplants actually done into equilibrium and to meet the Congressional intent to promote this treatment modality where medically appropriate.

In this comparative study, the researchers are surveying all of the freestanding independent agencies since they are believed to be the most effective and progressive part of the organ procurement system. Although there are only 21 independent agencies, they harvest about half of all the kidneys in the United States. The study will provide an indepth description of the operations of these agencies with an emphasis on the variations in their structures, management strategies, and organizational procedures. The analysis will be comparative in nature and highlight successful versus unsuccessful approaches to problems that they have in common. The study is expected to provide recommendations on how HCFA can intervene in the procurement system, via regulations and/or reimbursement policies, to improve its yield of transplantable organs and contain its costs. The grantee is expected to submit a final report to HCFA.

STUDY OF PHYSICIAN PRACTICES AND REIMBURSEMENT POLICIES FOR THE DELIVERY OF RENAL SERVICES

The results of three reimbursement studies by Northwestern University were described in the 1980 ESRD Annual Report to Congress. The present research in this important area builds upon this research base and should provide additional information in meeting the Congressional mandate to conduct a full and complete study of the reimbursement of physicians for services furnished to patients with end-stage renal disease.

One study is being performed as an intramural effort by the Office of Research. The intramural study will examine the effects of the physician reimbursement methods on program costs and choice of treatment setting, controlling for individual patient characteristics. The study will also examine whether there are differences in treatment style (e.g., frequency of dialysis or frequency of physician contact) that can be associated with the different reimbursement methods. Statistical regression techniques will be used for the analyses.

The study involves the analysis of a unique data set on ESRD patients, their sociodemographic characteristics, the characteristics of their regular dialysis or backup facilities, and Medicare reimbursements on their behalf. The data set was constructed by merging program data with a survey file collected by the Research Triangle Institute for the "Home Dialysis Study" published in 1978. The data file contains information on 469 patients and 39 facilities, with respect to the first year of 1976. That earlier study examined the factors which led to the selection of home or facility as the treatment site for individual patients.

The data analyses were begun in the fall of 1981. The results of the study will be a research report and policy paper.

A second study has been reviewed and approved for funding beginning in March 1982. A grant will be awarded to the University of Southern California for a project titled "Physicians Who Care for End-Stage Renal Disease Patients: A National Study of their Practices, Patients and Patient Care."

Under this project approximately 700 physicians will be surveyed. Using a log diary approach, detailed information will be solicited on specific services rendered to ESRD beneficiaries. The survey will include information on services provided to patients in physician offices, at home, in renal dialysis facilities, in hospitals, and elsewhere.

The study will include a broadly descriptive analysis of the data collected, identifying patterns evident in the data by region, facility workload, case-mix, etc. More rigorous statistical analyses will then be employed to examine the complex interrelationships between patient characteristics, physician characteristics, facility characteristics, and variations in treatment.

A STUDY OF ALTERNATIVE TYPES OF THERAPY FOR ESRD PATIENTS

HCFA awarded a 2-year grant, "The Impact of Alternative Types of Therapy on Patients with End-Stage Renal Disease," to Battelle Memorial Institute's Human Affairs Research Center in January 1981. The study focuses on several variables of interest to the program including an examination of quality of life, quality of care, and cost of care to patients undergoing different types of therapy for treatment of end-stage renal disease. The study also examines the extent of disability among dialysis patients and assesses the potential for improving the lives of dialysis patients by changes in the types of therapy or through the provision of rehabilitation services. Four treatment modalities are included in the study: facility dialysis, home dialysis, continuous ambulatory peritoneal dialysis, and renal transplantation.

During the first year of the study, the researchers developed a detailed study protocol and obtained both participating agreements and institutional review board clearances from the study facilities. A sampling design based on a stratified probability sample of ESRD patients by treatment modality from eleven facilities and transplant centers was developed, and a study universe of 950 renal patients was drawn. Several different survey instruments were developed and pretested. The primary data collection instrument and the patient interview schedule were administered to the study population.

In the second and final year of the study, the major activities will center around the completion of the data collection activities, the development of the analytical data model, and the preparation of the final report.

The data collection activities include the completion of the patient interview schedule and the patient's medical expenses diary, medical records data abstraction, and interviewing the dialysis and transplant centers. The ESRD program files containing data on Medicare billed charges and other data from the ESRD Medical Information System will be obtained and linked to the primary interview data. The analysis plans call for the development and testing of separate models of the quality of life and quality of care of patients.

Indicators of the quality of life will include patient sociodemographic characteristics, health status, functional limitations, work disability, social support, use of rehabilitation services, and type of therapy. Indicators of quality of care include hospital admissions, number of days hospitalized, physician visits, and patient mortality. Factors influencing quality of care which will be examined are personal patient characteristics, type of therapy, and structural features of the dialysis or transplant center.

Where feasible, standardized measures for the study variables will be used to assist the development of analytical scales and indices and expand the study results to other comparison groups.

Intermediate results in the form of descriptive statistics with tabular displays for direct use in policy discussions will be submitted as the survey instruments are tabulated. Among the most important policy relevant data to be reported in this modality study are: (1) the nature and extent of disability among dialysis and transplant patients; (2) the cost effectiveness of various approaches to the treatment of kidney diseases; and (3) documentation of the opportunity and out-of-pocket costs borne by ESRD patients and their families, nonremunerated costs borne by dialysis and transplant facilities, and costs borne by third party payors. Determining the impact of the type of therapy upon the quality of life of the patient and relating this information to the cost of care indicators is one of the most basic problems facing the effective administration and evaluation of the ESRD program.

COST OUTCOMES AND COMPETITION IN THE ESRD PROGRAM

In June 1981, HCFA awarded a two-year grant to the Urban Institute to examine the variations in costs and treatment outcomes to identify those factors associated with lower cost and/or higher survival rates.

Factors to be considered include case-mix, facility size, and physician compensation methods. In addition, a specific focus of the project will be an examination of the effects of competition between ESRD facilities. The project will assess whether free entry into the dialysis market either reduces costs or provides increased benefits to patients. A survey will be conducted to identify facility initiatives to attract and retain patients where several facilities are available to beneficiaries. Finally, the study will also examine the cost impacts of the certificate-of-need and minimum utilization rate requirements.

The study is primarily based on an analysis of the ESRD MIS data base (facility survey, cost survey, nonreimbursement patient records, and billing records) and supplemented by a telephone survey of 700 facility medical directors (300 independent and 400 hospital-based facilities).

The most important policy areas to be covered in the study are:

(a) Provider Reimbursement

- Should facility and/or physician reimbursement be based on capitated payment per patient with such payment covering all costs including hospital charges?
- Should case-mix adjustment be an element of reimbursement?
- What elements of costs are directly related to facility size, and how should reimbursement be designed to encourage optimal size?
- Does ownership and facility type affect total cost in ways not attributable to case-mix?

(b) Physician Compensation

- What is the relationship between physician compensation method and total cost per patient?
- Does the present physician capitation method need modification to provide better cost saving incentives?
- Are there different health outcomes under the two methods?
- Should one method be emphasized over the other?

(c) Competitive Effects

- Does restriction of the number of stations through minimum utilization rates and certificate-of-need actually help to control costs?
- Would free entry into the dialysis market either reduce costs or provide increased benefits to patients?

(d) Ownership Status

- Are there measurable differences in the health outcomes of patients treated at for-profit facilities?
- Should entry by investor-owned firms be encouraged or discouraged?

(e) Self-Care Patients

- What are the savings in self-care when case-mix adjustments have been included in the analysis? Do these savings warrant continued emphasis on self-care?

(f) Home Dialysis

- What contributions to a center's operating costs are made by home patients?
- When total costs, including all hospital care are considered, how much savings result from home care?

There are three major analytical sub-studies planned: variation in dialysis rates; total program costs per beneficiary patient-mix and their effect on costs of care; and death rate analysis. Each sub-study will result in a separate report to HCFA. A final report will also be prepared.

THE IMPACT OF CASE-MIX AND FACILITY CHARACTERISTICS ON TREATMENT COSTS AND UTILIZATION OF SERVICES

The primary focus of this two-year study by the University Health Policy Consortium is on the development of a case-mix model of ESRD patients and its application in studying the relationship between case-mix, assignment of patients to treatment modalities, and treatment costs.

The study is based on an analysis of 10 years of patient-oriented, longitudinal data from the Michigan Kidney Registry. The data for the 3,000 Michigan patients in the study will be supplemented with information from the ESRD program files. For a small subset of patients (250 patients), a detailed collection of changes in the patients' co-morbidity will be obtained from medical record abstracts.

The research design employs a clustering approach to understanding the characteristics of patients which influence the intensity of service utilization. The resulting patient risk groups will be analyzed with regard to the following dependent variables: (1) length of survival; (2) movement within the system to different modalities and settings; (3) organizational characteristics of providers from whom the patients receive care; and, (4) subsequent co-morbidity.

The results of the study will provide statistical information on how many and how often patients change from one type of treatment or one type of facility to another modality option. These patient flow models, as they are called, will be studied against their associated cost patterns so that case-mix adjustments may be made to compare performance between institutions.

STATISTICAL MODELLING STUDY OF THE ESRD DELIVERY SYSTEM

Indiana University was awarded a three-year grant in 1979 to model the ESRD patient care system. In this statistical modelling study, the researchers were given program generated data to estimate the model parameters. Once the model has been established and tested, it will be used to perform simulations of what impact changes in the incidence of the disease, type of therapy employed, or variations in entitlement provisions would likely have upon total programs.

The analysis will address the following six specific sub-study areas:

1. Reexamine the cost effectiveness of alternative therapies for ESRD
   -- Revision of simulation model with updated cost and mortality data
   -- Sensitivity of simulation of data and results

2. Impact of changes in patient selection
   -- Alternative payments for home dialysis aides
   -- Age and co-morbidity factors

3. Rehabilitation features of treatment alternatives
   -- Quality of life factors
   -- Sensitivity of cost effectiveness to quality of life factors

4. Analysis of continuous ambulatory peritoneal dialysis
   -- Costs and survival
   -- Cost effectiveness with respect to hemodialysis

5. Reimbursement issues in ESRD
   -- Documentation of reimbursement methods including target rate and incentive reimbursement approaches
   -- Cost effectiveness equations as a function of payment method and dialysis mode

6. Dynamic modelling of changes to ESRD treatment
   -- Costs and survival over time
   -- Dynamic impact of policy issues including altering dialysis treatment for new patients and changing reimbursement methods

INTRAMURAL ANALYSIS OF ESRD PROGRAM DATA

The ESRD program data is being analyzed in two intramural studies within the Office of Research. In one study, the reimbursement study, the purpose is to examine the trend in Medicare reimbursement for persons with end-stage renal disease. Reimbursement patterns will be examined from 1973 through 1979 with breakdowns by age, sex and race, and by network. Total reimbursements will be broken into inpatient, outpatient, physician, and other reimbursements. All of these data come from the Medicare Statistics System so it is not possible to distinguish between payments for dialysis and payments for nonrenal medical care. However, it will be valuable in that it will examine the total cost to the Medicare program of coverage for ESRD patients.

Further analysis will examine reimbursement patterns by type of treatment modality. Reimbursement differences between home and facility dialysis settings will be studied. Hospital-based and freestanding facility differences will be studied. Reimbursements for transplants will be traced not only for the year in which the transplant occurred but subsequent year Medicare costs as well.

Additional analyses will examine survival rates of renal patients by age, sex and race, as well as treatment modality. Survival rates by treatment modality could serve as an indirect measure to patient case-mix.

The results of the reimbursement will be in the form of technical papers.

The other study, the program statistics study, is designed to provide a comprehensive description and analysis of all the ESRD program data files. Cross-sectional and longitudinal analyses will be made on the beneficiary entitlements and

population statistics. The distribution characteristics of physician providers, institutional providers, other suppliers of service, related support industries, and professional associations will be included in this program statistics report. Also, selected data on program costs, reimbursements, and utilization from other studies and surveys will be reported.

THE ESRD PROGRAM RESEARCH AND EVALUATION PLAN

In an effort to control the rising costs of the ESRD program, to improve the quality of services that ESRD beneficiaries receive, and to improve program management, HCFA, with assistance from the Office of the Assistant Secretary for Planning and Evaluation, has developed a comprehensive ESRD Evaluation Plan. The Plan was completed in July 1981.

The goals and objectives for the Plan were to capture in one document the nature of the ESRD program and the evaluation issues that will be addressed in forthcoming initiatives. The specific objectives were:

1. To provide an overview of end-stage renal disease, the delivery system in which patients are treated, and the nature of the health care financing program which Congress enacted in 1972 to help patients finance the high costs of this disease.

2. To provide a review of the current and completed research and evaluation studies which have been conducted or sponsored by the Health Care Financing Administration.

3. To identify and discuss the kinds of evaluation issues and questions that are being asked of the program.

4. To provide a conceptual and organizational framework for understanding and classifying the evaluation issues into study areas.

5. To perform a systematic analysis of each evaluation issue within the study areas.

The evaluation plan discusses several cross-cutting issues related to the administration of the ESRD program. Along one dimension, the issues are arrayed against key program elements of access to care, quality of care, and cost containment. Along another dimension, the issues are grouped into study areas that have a common theme. Study areas include: the Congressionally mandated studies related to dialyzer reuse, dietary controls, and non-Medicare eligible patient populations; the management-oriented program performance studies related to operations, monitoring, and analysis; and the policy-oriented program impact studies related to the costs and benefits of different treatment modalities, the economics of the ESRD industry, the impact of new technologies, and the international experience of ESRD programs in other countries. In total, 20 distinct projects were described in the evaluation plan. Fifteen of the projects are currently funded and these address many, but not all, of the issues that have been identified.

B. SELECTED HIGHLIGHTS IN KIDNEY RESEARCH

The National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK) research support in the areas of kidney and urinary tract disorders during fiscal year 1981 amounted to over $40 million. This work included studies in the function of kidney, both normal and diseased; the basic physiological processes of the urinary tract; the role of immunological disorders in kidney and urinary tract diseases; chronic renal disease; dialysis and related maintenance therapies; and kidney transplantation.

The goals of the Kidney Disease and Urology Program of the NIADDK are prevention, early diagnosis, and treatment of kidney disease through development of an understanding of the basic mechanisms and causes of renal and urologic disorders. Areas of study include glomerulonephritis, nephrosis, interstitial nephritis, kidney and bladder stones, polycystic kidney disease, diabetic nephropathy, analgesic associated and other toxic nephropathies, immune disorders of the kidney, benign prostatic hyperplasia, and numerous other disorders. Chronic renal disease and end-stage kidney disease (ESRD) are two other important target areas, as NIADDK-supported scientists are seeking ways to reduce the number of patients dependent on ESRD treatment, dialysis and/or renal transplantation to compensate for lost kidney function. Other goals include delineation of the basic cause of kidney stones, effective therapy for patients suffering with kidney stones (urolithiasis) and devising of rational methods for preventing the occurrence of stones in the kidney.

During May 1981, the Kidney Disease and Urology Program of the Institute sponsored the Second Chronic Renal Disease Conference, which dealt with research progress in the areas of two major causes of end-stage renal disease: glomerulonephritis and cystic diseases of the kidney, as well as pediatric ESRD, the ethical issues involved in the management of young children with chronic renal failure, the control of treatment morbidity, and control of uremic toxicity with hemodialysis and hemofiltration therapy. A similar opportunity to review the state-of-the-art was provided at a meeting on the Renal Effects of Drugs and Environmental Toxicants, jointly sponsored by the NIADDK and the National Institute of Environmental Health Sciences. Scientists who attended these meetings discussed the toxicity of common antibiotics, industrial solvents, and environmental toxins such as lead, cadmium, mercury, and gold, as causes of acute renal failure as well as analgesic associated nephropathy.

KIDNEY AND URINARY TRACT STONES

Each year more than a million Americans ars hospitalized for the treatment of kidney and urinary tract stones. Kidney stones can cause urinary tract infection and also can arise as the result of infection.

About 20 percent of kidney stones may be caused by urinary tract infection and are associated with higher morbidity and mortality than in other types of stones.

Over the years, researchers supported by NIADDK have made major contributions to understanding the metabolic and physicochemical processes leading to urinary stone formation. Knowledge of the factors leading to stone formation has enabled physicians to tailor therapy to various underlying causes. During the past 10 years, the work of numerous NIADDK grantees has contributed to development of new methods of treating kidney stone disease. These include thiazide diuretics, which are being used to reduce hypercalciuria (a metabolic abnormality that occurs in 50 to 70 percent of patients with stones); orthophosphate therapy, which is used to lower urinary calcium and increase availability of urine pyrophosphate (an inhibitor of stone formation) and allopurinol, which is used to dissolve or to prevent further development of uric acid stones.

Past research has also established the theory that a low output of urine predisposes a person to formation of kidney stones. Clinicians have hypothesized that if an individual increases fluid intake with resultant increase in urine volume, the tendency to form kidney stones might be diminished. Other theorists suspected that this approach might result not only in dilution of the urine, but also in dilution of the urinary concentration of inhibitors of crystal growth.

NIADDK grantee, Dr. Charles Y. C. Pak, and his associates at the University of Texas Health Science Center at Dallas conducted a study to determine what would happen to urinary crystallization of calcium salts if distilled water were added to urine specimens as well as to the dietary regimen of patients with kidney stone disease. Dilution decreased the tendency of urine contained in laboratory vessels to crystalize calcium salts, and likewise in patients. Results demonstrated that dilution of urine significantly reduces the tendency to crystallization leading to stone formation. The investigators state that these results support the theory that increasing fluid intake, so as to ensure a urine volume above 2.5 liters per day, may effectively inhibit formation of stones. Patients with kidney stone disease probably can benefit from this research by increasing the amount of water or other fluids that they consume.

RESEARCH ADVANCES

Urolithiasis

The productivity of the five Urolithiasis Specialized Centers of Research (SCORs) has been such that the characterization of the underlying problems leading to kidney stone formation is possible in the majority of patients permitting a definitive diagnosis to be reached now through simpler and more accurate clinical evaluation protocols.

- At the University of Texas Health Science Center, a simple yet reliable ambulatory protocol for evaluation of stone-forming patients was developed and is being assessed by Dr. C. Y. Pak and collaborators. The underlying mechanisms leading to kidney stone formation has been determined in 95% of 241 patients with nephrolithiasis evaluated at this center. By recognizing the physicochemical and physiologic abnormalities that lead to kidney stone disease in individual patients, these investigators under Institute's support are developing selective treatment modalities aimed at arresting the identified abnormalities.

- Present treatment modalities being tested include: thiazides for renal hypercalciuria (RH) (renal calcium leak) and absorptive hypercalciurias (AH) (gastrointestinal hyperabsorption of calcium); sodium cellulose phosphate for the absorptive hypercalciurias; orthophosphate for absorptive hypercalciurias; allopurinol plus thiazide for absorptive hypercalciurias with hyperuricosuria; high fluid intake is recommended for all urolithiasis cases and low calcium diet for normocalciuric kidney stone-forming patients.

  The "optimum" treatment modalities led to significant clinical improvement and remission or reduction of stone formation as compared with the pretreatment programs. The safety and efficacy of these and other treatment modalities is at present under evaluation in one way or another, at all five SCORs.

- At Michael Reese Hospital and Medical Center in Chicago, 850 stone-forming patients were evaluated by Dr. F. L. Coe and collaborators. Clinical data on these patients is being analyzed so that factors influencing the risk of calculi recurrence can be prospectively identified.

  Hypercalciuria appeared as an important risk factor and was found in more than 40% of this patient population.

  To date, glycosaminoglycans, acid glycoproteins, RNA and RNA fragments, all normally present in urine, have been shown to be potent inhibitors of calcium oxalate crystal growth.

- At the Mayo Clinic, Dr. L. H. Smith and collaborators continued to examine the role of urinary macromolecules in the inhibition of calcium oxalate crystal growth. The proportional contribution of each of these groups remains to be defined.

- At the University of Florida, under Dr. B. Finlayson, efforts are underway to clarify the physicochemical features of calcium oxalate precipitation and aggregation in order to improve our understanding of urinary factors

affecting stone formation. It was demonstrated that crystal growth rates in urine is governed by the interplay between supersaturation and inhibitors. For citrate, as an example, growth inhibition is functionally identical with absorption.

- At Yale University, Dr. H. Rasmussen and collaborators demonstrated the likelihood that (1) 1,25(OH) D regulates calcium transport across the brush border membrane by a primary effect on membrane lipid structure; (2) there is a close correlation betwen plasma 1,25(OH) D concentration and urinary calcium excretion in man; (3) patients with primary hyperparathyroidism (I HPT) and recurrent renal calculi have a bihormonal disease with increases in both plasma iPTH and 1,25(OH) D levels; and (4) most patients with absorptive hypercalciuria have high plasma levels of 1,25(OH) D .

ANALYTICAL METHODOLOGY FOR MEASURING OXALATE IN URINE

The majority of stones formed within the urinary tract in patients studied in the Western Hemisphere contain oxalate as the major anionic component. Measurement of calcium and oxalate is necessary in order to study excretion rates and other facets related to stone formation. The lack of a simple, reliable method of measuring oxalate in biological fluids has been a major deficiency for the study of oxalate metabolism. The development of a simple reliable method for measuring oxalate for routine clinical laboratories which can also be adapted to microanalysis by the renal physiologist was identified as a pressing need by the Coordinating Committee of the Research Needs in Nephrology and Urology Study.

Under NIADDK contracts, two research groups are in the final stage of development of new methodologies for the accurate and precise determination of oxalate in human urine. Dr. J. H. Peters, of Standford Research Institute in Menlo Park, California (under Contract No. 1 AM 9-2213) has developed a method involving high pressure liquid chromatography (HPLC) separation of derivatives of oxalate with o-phenylenenediamine. Dr. H. A. Moye at the University of Florida in Gainesville (under Contract No. 1 AM 9-2212) has utilized oxalate as its bis-2-chloroethylester. This derivative is especially suitable for measurement by electron capture detection. KUH Staff developed a plan to test and compare these methodologies which provides a common pool of samples for analysis to each of the laboratories. A third laboratory, which is using one of the recognized older oxalate methods (that is both cumbersome and time consuming), also is analyzing samples from the pool for comparative purposes. Three exchanges of samples were carried out.

With development techniques such as these to aid in the evaluation of stone-forming patients, a more effective approach to therapy can be developed.

Treatment of Neurologic Complications of Uremia

Overactivity of the parathyroid gland is a frequent complication of chronic kidney failure that may adversely affect the electrical activity of the brain. Previous studies of patients and animals with acute or chronic renal failure showed an association between excess circulating parathyroid hormone (PTH) and abnormally slow frequencies displayed in the patient's encephalogram (EEG), a recording of his brainwaves. On the basis of this evidence, clinicians reasoned that suppressing heightened parathyroid activity might correct EEG abnormalities that indicate brain dysfunction.

Dr. Shaul G. Massry and associates at the University of Southern California School of Medicine at Los Angeles, in research supported by NIADDK, conducted a study involving long-term therapy with a hormone known to scientists as 1,25-dihydroxivitamin D3. The researchers tested the effects of the hormone and surgical removal of the parathyroid gland upon blood levels of parathyroid hormones and the EEG patterns in uremic patients undergoing dialysis. Results confirm previous findings that overactivity of the parathyroid glands stemming from renal failure is responsible for EEG abnormalities in patients with uremia. The researchers say the EEG abnormalities reflect a toxic effect of excess PTH upon the brain, and the study shows that this condition is reversible by medical or surgical suppression of the parathyroid glands. Results of this study also demonstrate the therapeutic importance of use of the hormone 1,25-dihydroxyvitamin D3 for management of central nervous system complications in uremic patients.

Prevention of Parathyroid Overactivity in Chronic Renal Failure

Institute grantee, Dr. Eduardo Slatopolsky, and associates at the Washington University School of Medicine in St. Louis recently conducted tests of a new phosphorus-binding aluminum oxide-based gel, known as Controphos. The gel has a high phosphorus-binding capacity and effectively controls absorption from the gastrointestinal tract, thereby preventing overactivity of the parathyroid glands in chronic renal failure.

Uncontrolled intestinal absorption of phosphorus in patients with chronic renal failure leads to excessive parathyroid activity and bone abnormalities. Controphos was developed by biomedical engineers to counter these problems, and in animal testing and in the recent clinical trials in humans, the gel corrected high blood phosphorus levels and significantly increased fecal excretion of phosphorus. The researchers report that Controphos, when baked into breadsticks, is well tolerated by uremic patients, and surpasses other agents in phosphorus-binding capacity. Although use of Controphos did not result in any significant accumulation of aluminum in the brain of uremic rats, the investigators state that long-term studies in humans are necessary to determine the degree of aluminum retention that may occur as a result of ingesting this new phosphate-binding preparation over a period of time.

Kidney Transplant Survival Rate Improved

When severely diseased kidneys are no longer functioning adequately, renal transplantation with an appropriately matched kidney can be a means of therapy, but results of such surgery are still imperfect. Approximately 25 percent of living related donor organs and 45 percent of cadaver donor organs are lost through rejection within the first year after transplantation.

In previous reports, NIADDK grantees, Drs. Oscar Salvatierra, Jr., Paul I. Terasaki and associates at the University of California Medical Centers in San Francisco and in Los Angeles had shown that the success of cadaver kidney transplants increases in proportion to the number of blood transfusions given before transplantation.

- Prior Blood Transfusions Markedly Improve Kidney Transplant Graft Survival

  In a study of data from 68 transplant units, Dr. Terasaki has shown that three year graft survival in patients pre-transfused with one or more units of all blood products is 50% or higher compared to 30% for the nontransfused recipient. The benefit increases with the number of pretransfusions and is greater for the more mismatched grafts. For example, the Los Angeles investigators showed that one year graft survival is in the range of 60-70% for recipients receiving more than 10 pretransfusions compared to 35-45% for those with none.

  Improvement of graft survival is a most important factor in the overall cost of maintenance of the end-stage renal disease patient population.

This research has resulted in the recommendation that more frequent antibody screening be performed in patients who are candidates for cadaver kidney transplantation, and the study has the potential for liberalizing criteria for kidney transplants.

- With reduced renal mass, nephrotoxicity of phosphate is greatly enhanced.

  Previous studies of animal models have demonstrated that high phosphate intakes have adverse effects on chronic renal failure models. High calcium-phosphate products accelerate renal damage and further loss of renal function. In studies of low protein diets for maintenance of chronic renal disease patients prior to dialysis, the data show examples of slowing of the rate of loss of renal function. Therefore, an understanding of potential mechanisms responsible for the nephrotoxicity of phosphate is of significant practical importance.

Dr. Allen C. Alfrey and associates at the University of Colorado studied renal histologic changes on a rat model of chronic renal failure maintained on diets of varying phosphate content. He observed that rats on the higher phosphate diets had higher serum calcium, and showed more calcification in the kidney and adverse histological changes. In studies of kidneys removed from chronic renal failure patients, Dr. Alfrey observed that the calcium content was greater than normal, 157 mmol/kg of tissue compared to 17.

Dr. Alfrey's findings lend support to the hypothesis that higher phosphate diets may accelerate loss of kidney function in renal failure patients through calcification in the cortical tubular cells, basement membranes and interstitium, occurring in the course of renal failure.

These results and those of other investigators offer additional incentive to demonstrate practical means for slowing loss of renal function in renal failure patients by maintenance on low phosphate diets, use of sorbents, or drugs.

Further investigations of the detailed molecular mechanisms responsible for the rapid calcification are also strongly indicated.

o Glomerulonephritis mediated by an Immune-Complex of Human Thyroglobulin

In patients with immune-complex mediated glomerulonephritis, glomerular immunoglobulin and complement deposits may be readily demonstrated. Identification of the antigen involved is a considerably more difficult task. Several investigators have shown that human thyroglobulin can act as a nephritogenic antigen in human glomerulonephritis. The relationship of the circulating immune complexes to the glomerular immune-complex deposits has not yet been determined.

Dr. Stanley C. Jordan and associates at the University of California, Los Angeles, have shown by immunochemical analysis that human thyroglobulin is the antigenic component of circulating immune complexes, which correlated well with disease activity in a young patient with glomerulonephritis (1). The investigator identified human thyroglobulin in the immune complexes isolated from the patients serum by three independent methods.

The finding of Jordan et al increases the importance of a reexamination of the role of circulating immune complexes in human renal disease. This finding also raises the urgency of additional animal model studies of renal disease so that the exact mechanism by which antigen-antibody systems influence the disease state may be determined.

Dr. Jordan's results should serve to stimulate a more sophisticated, precise series of investigations on animal models of human glomerulonephritis. The ultimate hope would be to gain a more fundamental understanding of the disease mechanisms leading to approximately half the cases of end-stage renal disease.

- Role of the kidney in hyperprolactinemia of uremia

One widespread complication of the chronic renal failure patient maintained on dialysis is sexual dysfunction, especially impotence in male patients, and an ovulation in females. While abnormalities in various hormone concentrations have been demonstrated, there are no generally accepted explanations of the causes of functional disturbances.

Dr. D. S. Emmanouel and coworkers at the University of Chicago have discovered a marked impairment in an acutely uremic rat model. Their results show that while the normal rat kidney contributes two-thirds of the metabolic clearance of prolactin, in the uremic rat model, loss of clearance of the hormone is proportional to loss of glomerular filtration.

The demonstration of hyperprolactinemia and the impaired degradation of the hormone may stimulate the development of pharmacologic or other means to alleviate or minimize sexual dysfunction of ESRD patients.

Dr. Emmanouel's observation would also be expected to influence other research on mechanisms responsible for complications of the ESRD patient.

- Multiple Use of Hemodialyzers May Offer Cost Savings

Dr. Norman Deane and associates at the National Nephrology Foundation, New York have shown, in a laboratory study, that reprocessing of hollow fiber hemodialyzers may be practical. The investigators have found that by following a specific procedure with suitable process and quality controls, reprocessed hemodialyzers have functional properties similar to new dialyzers. Their data also demonstrate that the cleanliness and sterility of reprocessed hemodialyzers are reasonable.

These results may make it possible to achieve overall cost savings for the maintenance of the end-stage renal disease patient population, a burden largely borne by the Federal Government.

- Exercise Training Reduces Complications of Chronic Renal Hemodialysis Patients

In a continuing study of the effects of exercise training on hemodialysis patients, Dr. Andrew Goldberg and associates at Washington University, St. Louis, have demonstrated significant improvements. Vigorous exercise training reduces blood pressure in hypertensives, increases red cell counts, and lessens abnormalities in lipid and glucose metabolism. The exercised patients also showed fewer abnormalities in bone mineral metabolism. Psychological function of exercising patients improved with less depression, and better mood and social adjustment.

The significance of these findings is that exercise training may provide a stimulus for achieving a higher rehabilitation level in the end-stage renal disease patient population.

Polycystic Kidney Disease is responsible for 9-11 percent of ESRD. Only recently have animal models become available.

- Comparison of Tubular Basement Membranes from Controls and Polycystic Animals

  The adult form of polycystic renal disease (PKD) is inherited as an autosomal dominant trait which is characterized by a slowly progressive condition affecting the renal tubules. It is a common problem leading to end-stage renal failure and it is estimated to be responsible for 9-10 percent of the end-stage renal disease patient population. The disease is characterized by progressive focal increases in the diameter of renal tubules until they reach enormous proportions and eventually choke off the normal surrounding nephrons. The cause of the disease is unknown and there is no treatment to prevent the disease; however, there is mounting evidence that the basement membrane of the affected tubules is abnormally compliant. Until recently, a good animal model has not been available to study this malady.

  Three chemically induced animal models of PKD are currently under study at the Kansas University Medical Center: (1) nordihydroguiarctic acid (NDGA)-fed rats, (2) diphenyl thiazide-fed rats, and (3) diphenylamine (DPA)-fed mice. The investigator, Dr. Ralph J. Butkowski, a biochemist, is studying the tubular basement membrane (TBM) in these three models. Another investigator, in the Department of Microbiology, has a strain of mice that has a genetic form of PKD, which provides a model for comparison. Thus far, TBM has been prepared from the NDGA model while the DPA model is still in the early stages of cystic changes following six months of feeding.

Progress reported to date from this laboratory indicates that kidneys from NDGA-fed rats are much larger than controls and have diffuse cystic lesions. Their texture upon dissection is abnormal (possibly due to the cysts being filled with fluid) and there is a tendency for purified tubules of this model to lose their cells to a greater degree than controls. Furthermore, their amino acid composition reveals a ten percent elevation which is characteristic of collagen; namely, hydroxyproline, glycine and hydroxylysine.

Polyacrylamide gel electrophoresis in the presence of SDS has not revealed any difference between normal and polycystic animal kidneys, whereas electrophoretic analysis of the product of pepsin digestion indicates that the same polypeptides are seen in both sets of animals; however, the ratio of polypeptides was different for each of the five digestions performed. Future proposed research by this group (which includes two biochemists, a nephrologist and a renal pathologist) includes plans to: (1) further characterize the nature of the observed differences in TBM structure by careful chemical and physical analysis of the collagenous and noncollagenous polypeptides from normal and in DPT-induced polycystic rats; (2) characterize the TBM of other drug-induced and natural models of PKD in order to establish whether similar differences exist in these models; and (3) continue his on-going characterization of rabbit TBM with emphasis on the procollagen-like and collagen constituents.

Four advances in kidney physiology highlight new models and techniques.

- Isolated Glomerular Perfusion - a new investigative technique

A technique is under development in the renal laboratory of Dr. J. H. Stein and associates at the University of Texas Health Science Center, San Antonio in which the glomerular dynamics of the isolated dog glomerulus will be measured in vitro. With this technique, these investigators will be able to determine the effect of various pharmacologic agents on glomerular dynamics and to measure directly the glomerular ultrafiltration coefficient in normal and in patho-physiologic conditions. Further, this technique will make it possible to compare glomerular dynamics in superficial and juxtamedullary glomeruli for the first time.

Although the impetus to develop this method was to find a better means for understanding of the physiologic control of glomerular filtration, it appears that the most important application of this technique may be as a powerful tool to study the immunologic basis of renal disease. For example, it is known that many renal diseases occur as a consequence of

the deposition of immune complexes within the glomerulus but the mechanism(s) involved in the deposition of these immunogenic substances is not known. Prior to the development of this method, no methodology was available to directly evaluate in any isolated vascular bed the factors which lead to the extraction of immune complexes within the glomerulus. Future plans outlined by the group include investigations to determine the characteristics of a complex (i.e., size, shape, or charge) that are necessary for deposition within the glomerulus and what pharmacologic agents (i.e., steroids, histamine, etc.) may modify this process. With these data, it is anticipated that the pathophysiologic basis of various renal diseases will be better understood.

o Avian Kidney Models

Avian kidneys, having a dual circulation (renal arterial and renal portal systems) and characteristics of nephrons from both mammalian (long mammalian-type nephron with loop of Henle) and primitive vertebrates (short reptilian-type nephrons), serve as a useful experimental model in which to differentiate glomerular and tubular responses to drugs and hormones. Furthermore, a primitive form of macula densa is evident in the distal tubule of birds. Thus, the evolution of the functional relationship among the juxtaglomerular (renin secreting) cells, macula densa and glomerular hemo-dynamics, and possible feedback control system of glomerular filtration rate (GFR) may be elucidated in bird kidney models.

With the increasing evidence indicating that the angiotensin and adrenergic nervous system interacts at the receptor level in mammals and nonmammalian vertebrates, Dr. Nishimura's data in the chicken indicate that angiotensin causes vasopressor actin primarily by releasing catecholamines, and exerts depressor action. She suggests that this may be by a direct action or by the release of prostaglandins. Furthermore, since birds have higher blood pressure (BP) than mammals, beta adrenergic function appears to be important for maintaining BP. Future studies by Dr. Nishimura's group on the bird should aid in dissecting out the role of the renin-angiotensin and adrenergic nervous system in the control of BP in mammals.

o Analysis of Intracellular Ions Concentration by Electron Microprobe

Although other disciplines have made use of the powerful method of electron probe microanalysis, its use in the kidney community did not begin until the early 1970's. It has been adopted for analyzing the ionic composition (sodium, potassium, calcium, magnesium, chloride, phosphorous, and sulfur) of glomerular ultrafiltrate and proximal and

distal tubular fluid samples. The advantages of the system are its specificity for many ions which are presently difficult to identify, the minute (picomolar) samples needed, and the preservation of the sample following analysis. With this technique, insight into transport mechanisms are being gained by comparing the tubular cells to the tubular fluid ionic content. Methods developed with this technique are used to study the handling and location of drugs within the kidney and other organs as well.

Members of the Renal Unit at Massachusetts General Hospital, Drs. J. V. Bonventre and C. A. Rabito, are using this method to develop techniques for determining the intracellular composition of isolated cultured renal epithelial cells. With these techniques, they have thus far demonstrated that ouabain, a potent inhibitor of the Na-K -ATPase enzyme, results in a marked reduction in intracellular potassium and a marked increase in intracellular sodium of cultured porcine LLC-PK cells. The continued refinement of electron microprobe analysis as applied to cultured epithelial cells will likely provide new insight into the understanding of epithelial cell transport processes, cellular metabolic processes, and cell volume regulation.

- First demonstration of a calcium-sensitive enzyme system in vasopressin-responsive tissue

The possibilities of the following findings for enhancing our understanding of the role of intracellular calcium and its interaction with the vascular role of vasopressin are extraordinary, particularly in the areas of hypo- and hypertension, acute renal failure and the impaired organ perfusion associated with heart failure and liver disease. Studies conducted by Dr. Dennis A. Ausiello, at the Massachusetts General Hospital, have demonstrated for the first time a calmodulin-sensitive adenyl cyclase in a porcine kidney epithelial cell line. In collaboration with a Hematology-Oncology group, Dr. Ausiello has continued to develop his ideas concerning the interactions of vasopressin and calcium in microfilament and microtubule organization. These studies have led to the demonstration of actin-binding protein and, for the first time, gelsolin in vasopressin-sensitive tissue. These studies should continue to define the alterations induced by vasopressin and CAMP in those cytoskeletal proteins that appear to be important in the development of the water flow response to the hormone. It is suggested that vasopressin could influence vasopressin-sensitive tissues such as toad bladder and renal medullary cells by changing Ca levels.

C. ACTIVITIES OF NETWORK ORGANIZATIONS

Introduction

The purpose of the End-Stage Renal Disease (ESRD) program is to promote high quality care and the efficient distribution and utilization of resources in the delivery of kidney dialysis and transplantation services. Section 1881 of the Social Security Act authorized the establishment and support of Network organizations to accomplish this purpose; 32 Network Coordinating Councils (NCCs) have been designated. The NCCs are nonprofit, voluntary groups composed of one representative from each area dialysis and transplant facility, as well as at-large members representing ESRD patients and professional disciplines (such as social workers, dieticians, etc.) involved in the delivery of ESRD care. Total funding for NCCs increased from $5.3 million in 1980 to nearly $6 million in 1981, while the total number of ESRD beneficiaries climbed from 57,061 to 63,646. Most of this funding increase was used in the establishment of automated patient specific data systems for individual Networks.

Each NCC establishes a Medical Review Board and is supported by a staff responsible for the administrative and fiscal management of Council activities. Council and Medical Review Board activities for 1981 fell into the following major areas: promotion of increased home dialysis and transplantation, quality assurance, planning for facility certification and expansion, data collection and management, and special initiatives. As part of the 1981 funding process, Networks were required to establish measurable objectives addressing these areas of responsibility and to include specific methodologies for accomplishing the objectives. Following are brief summaries highlighting Network progress in these five areas during 1981.

Promotion of Increased Home Dialysis and Transplantation

Major Network efforts in this area focused on educational and training programs designed to place patients in the most appropriate treatment modality. In particular, Networks were required to meet the Congressionally mandated goal of encouraging home dialysis and transplantation for the optimal number of patients who are medically, socially, and psychologically suitable candidates for such treatment. The total number of home dialysis patients in 1981 was up 23.5 percent over 1980 while the number of transplants rose by 4.4 percent. When compared with the 12.2 percent rise in total dialysis population, this represents a significant net increase in the proportion of home dialysis patients (from 14.6 percent of the total dialysis population in 1980 to 16.1 percent in 1981) but a decrease in the proportion of transplants performed (8.2 percent to 7.7 percent). The number of transplants performed rose in 16 Networks and fell or remained constant in 16 others. Please consult the "Dialysis" and "Transplants" sections of this report for individual Network statistics on increases or decreases in treatment modality utilization.

There was an 85.6 percent increase in the number of CAPD patients in 1981 with 46 percent of all home patients now on CAPD compared to 30 percent in 1980. The percentage of CAPD patients has increased throughout the nation, however, with little evidence of any correlation between Network educational efforts and the rate of increase.

One approach used by Networks to promote increased home dialysis and transplantation involved the establishment and monitoring of criteria for the appropriateness of treatment referrals. Once criteria are established, some Networks are monitoring facilities to ensure that patients are referred to the appropriate treatment modalities. Two Networks reported the identification for transplant of substantial numbers of patients previously on chronic maintenance dialysis. This type of referral monitoring system, which requires a large measure of facility cooperation, is currently ongoing or under development in roughly half of the 32 Networks.

Quality Assurance

The primary Network activity in the area of quality assurance has historically been the performance of Medical Care Evaluation studies (MCEs). Each Network facility is required to participate in at least one MCE per year. Common topics for Network MCE studies in 1981 included dialyzer reuse, transplant and dialysis morbidity rates, transplant graft and patient survival rates, long-term care planning, nutrition standards, and various CAPD related issues such as long-range patient impact and peritonitis incidence.

Through the development of data collection systems, Networks employed profile analysis techniques more effectively and to a greater extent in 1981. Some of the more advanced Networks conduct annual studies comparing patient characteristics with patient survival, graft survival, hospitalization rates, and morbidity rates in order to highlight abnormalities and identify trends. The efficacy of such studies was shown in one Network which discovered an unexpectedly high rate of post-transplantation mortality among children in its area. This led the Network's Medical Review Board to establish an MCE study in 1982 investigating survival rates in adjacent areas and comparative rates between specialized pediatric and nonpediatric facilities. Such indepth profile analysis and follow-up is now underway in only about 8 Networks; however, the ability and inclination of the majority of Networks to emulate this pattern is yet to be demonstrated.

A final area of quality assurance activity which should be noted is the implementation by two Networks of joint utilization review with PSROs in the Network area due to suspected inappropriate inpatient admissions.

While many Networks conduct their own review of facility dialysis initiation practices, this review has always been done only on a retrospective basis.

Planning for Facility Certification and Expansion

During 1981, Networks continued to serve in an advisory capacity to local, State and Federal agencies in reaching final decisions regarding the expansion and certification of ESRD facilities. Their primary responsibility in this area is to provide reliable data concerning the current and projected need for ESRD services in the Network to the appropriate health planning agencies.

Data Collection and Management

Another function performed by Networks is that of data management. A Network's ability to collect, analyze and distribute data relates directly to its functions of promoting appropriate modality referrals, quality patient care, and informed planning decisions. Twenty-one Networks have now implemented automated patient specific data systems; manual data collection continues in the other 11 Networks. However, the Networks vary widely in their ability to validate and analyze this data and to apply the results of such analysis.

As previously described, many Networks use their data collection and analysis capability to identify problem areas and trends in patient modality selection and quality of care delivery. Almost all Networks share their information with the agencies responsible for health planning decisions. Another facet of the Network data function has been their continuing work with providers to assure greater compliance and accuracy in the submission of national Medical Information System (MIS) forms. Effective January 1, 1981, the ESRD program made Networks responsible both for monitoring the submission of these nonreimbursement forms and for validating submitted data prior to its addition to the national system.

Special Initiatives

Network special initiative activities continued to focus on efforts to increase patient participation and rehabilitation. One innovation has been the development of peer resource counselling and training programs in which experienced ESRD patients help new patients to understand their options. Patient advisory groups have proliferated with five Networks forming such groups in the past year, while many others continue to function to offer opportunities for increased patient input and involvement in Network activities. At least eight Networks now have patient rehabilitation studies underway and a number of Network representatives serve on the patient rehabilitation task force commissioned last year by HCFA.

Following is a list of some other special initiative activities reported by Networks in 1981:

1. Communication with State Vocational Rehabilitation Agencies in order to promote improved access by ESRD patients;

2. Establishment of disaster preparedness plans and conduct of studies on patient transportation problems;

3. Production and distribution of patient education handbooks in such areas as treatment options, patient rights and responsibilities, renal nutrition and cooking guidelines, and available patient grievance mechanisms;

4. Design and implementation of a training program for State ESRD Surveyors; and

5. The conclusion of a successful search by one Network for a nephrologist for an underserved Navajo Reservation.

APPENDICES

Appendix A
ESRD Network Areas

Hawaii and Pacific Islands Constitute Network 1

Alaska Is Part of Network 2

Puerto Rico and Virgin Islands Constitute Network 29

APPENDIX B - TABLES AND FIGURES

APPENDIX C - DATA SOURCES

Table 1	ESRD Medical Information System 1981 Facility Surveys
Table 2	ESRD Medical Information System 1980, 1981 Facility Surveys
Table 3	ESRD Medical Information System 1981 Facility Surveys
Table 4	ESRD Medical Information System 1981 Facility Surveys
Table 5	ESRD Medical Information System 1980, 1981 Facility Surveys
Table 6	ESRD Medical Information System 1981 Facility Surveys
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Table 8	Medicare Certification Files
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Table 12A, B	Medicare Fiscal Intermediaries' Reimbursement Files
Table 13A, B	Medicare Fiscal Intermediaries' Reimbursement Files
Table 14	Medicare Fiscal Intermediaries' Reimbursement Files

Table 15 Medicare Certification Files

Table 16 ESRD Medical Information System
1981 Facility Surveys

Table 17 Office of Research and Bureau of Data Management and Strategy, HCFA

Table 18 Office of Research and Bureau of Data Management and Strategy, HCFA

Table 19 Office of Research and Bureau of Data Management, and Strategy, HCFA

Table 20 Office of Research and Bureau of Data Management, and Strategy, HCFA

Table 21 ESRD Medical Information System

Table 22 ESRD Medical Information System

Table 23 1979 Medpar 20 Percent Sample of Hospital Stays

Table 24 Prepared for Inclusion in the FY 1983 Budget by the Office of Financial and Actuarial Analysis

APPENDIX D - 1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

SOURCE: ESRD MEDICAL INFORMATION SYSTEM 1981 FACILITY SURVEYS.

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE		ZIP	LIVING	CADAVERIC	TOTAL
1	120010 ST FRANCIS HOSP HONOLULU	HI	96817	3	9	12
	• NETWORK TOTALS •			3	9	12

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
2	380009 UNIVERSITY HOSP PORTLAND OR	97201	21	55	76
2	500005 VIRGINIA MASON HOSP SEATTLE WA	98101	8	13	21
2	500008 UNIVERSITY OF WASHINGTON HOSP SEATTLE WA	98105	19	17	36
2	500027 SWEDISH HOSP MEDICAL CENTER SEATTLE WA	98104	19	9	28
2	500054 SACRED HEART HOSP SPOKANE WA	99204	1	1	2
	• NETWORK TOTALS •		68	95	163

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
3	050047 PRESBYTERIAN HOSP-PACIFIC MED CTR SAN FRANCISCO CA	94115	5	60	65
3	050454 UNIVERSITY OF CALIF HOSPS AND CLINIC SAN FRANCISCO CA	94122	68	92	160
3	050599 SACRAMENTO MED CTR-UNIV OF CALIF SACRAMENTO CA	95817	6	10	16
	• NETWORK TOTALS •		79	162	241

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER / PROVIDER NAME / CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
4	050025 UNIVERSITY HOSP OF SAN DIEGO CO SAN DIEGO CA	92130	12	10	22
4	050069 ST JOSEPH HOSP HEMODIALYSIS CTR ORANGE CA	92668	1	18	19
4	050123 CHILDRENS HOSP OF LOS ANGELES LOS ANGELES CA	90027	0	18	18
4	050245 SAN BERNARDINO COUNTY MED CENTER SAN BERNARDINO CA	92404	5	14	19
4	050262 UCLA HOSP/CENTER FOR THE HLTH SCIENCES LOS ANGELES CA	90024	11	25	36
4	050327 LOMA LINDA UNIVERSITY MEDICAL CENTER LOMA LINDA CA	92354	0	13	13
4	050348 ORANGE CO MEDICAL CENTER ORANGE CA	92668	2	19	21
4	050373 LOS ANGELES CO/USE MEDICAL CENTER LOS ANGELES CA	90033	9	10	19
4	050376 HARBOR GEN HOSP OF LOS ANGELES CO TORRANCE CA	90502	2	12	14
4	050502 ST VINCENTS HOSP LOS ANGELES CA	90057	31	89	120
4	050625 CEDARS-SINAI MEDICAL CENTER LOS ANGELES CA	90048	1	5	6
	* NETWORK TOTALS *		74	233	307

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
5	060024 UNIVERSITY OF COLORADO-ESRD DENVER CO	80262	12	36	48
5	460009 UNIVERSITY OF UTAH HOSP SALT LAKE CITY UT	84132	19	10	29
	• NETWORK TOTALS •		31	46	77

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
6	030002 GOOD SAMARITAN HOSP PHOENIX AZ	85006	12	14	26
6	030024 ST JOSEPHS HOSP + MEDICAL CENTER PHOENIX AZ	85013	0	3	3
6	030064 UNIVERSITY HOSP TUCSON AZ	85724	0	1	1
6	03013F VA HOSP TUCSON AZ	85713	11	8	19
6	320001 BERNALILLO CO MEDICAL CENTER ALBUQUERQUE NM	87106	12	9	21
	• NETWORK TOTALS •		35	35	70

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
7	240004 REGIONAL KIDNEY DISEASE PROGRAM MINNEAPOLIS MN	55415	3	42	45
7	240049 UNIVERSITY OF MINNESOTA HOSP MINNEAPOLIS MN	55455	85	76	161
7	240061 ROCHESTER METHODIST HOSP ROCHESTER MN	55901	29	15	44
	• NETWORK TOTALS •		117	133	250

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
8	160058 UNIVERSITY OF IOWA HOSP + CLINICS IOWA CITY IA	52240	12	52	64
8	280088 BISHOP CLARKSON MEM HOSP OMAHA NE	68105	0	42	42
	• NETWORK TOTALS •		12	94	106

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
9	170040 UNIVERSITY OF KANSAS MEDICAL CENTER KANSAS CITY KS	66103	2	26	28
9	170122 ST FRANCIS HOSP WICHITA KS	67214	4	11	15
9	260014 BARNES HOSP ST LOUIS MO	63110	22	25	47
9	260027 RESEARCH HOSP + MEDICAL CENTER KANSAS CITY MO	64132	5	11	16
9	26009F VA HOSP ST LOUIS MO	63106	9	20	29
9	260101 ST LOUIS CHILDRENS HOSP ST LOUIS MO	63110	3	4	7
9	260138 ST LUKES HOSPITAL KANSAS CITY MO	64141	7	21	28
9	260141 MISSOURI UNIVERSITY HOSP COLUMBIA MO	65201	1	12	13
	* NETWORK TOTALS *		53	130	183

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
10	040016 UNIVERSITYOF ARKANSAS MEDICAL CENTER LITTLE ROCK AR	72201	8	3	11
10	370001 HILLCREST MEDICAL CENTER TULSA OK	74104	8	9	17
10	370035 OKLAHOMA MEMORIAL HOSPITAL OKLAHOMA OK	73105	3	7	10
10	370037 ST ANTHONY HOSP OKLAHOMA CITY OK	73102	7	10	17
10	370167 OKLAHOMA CHILDREN S MEM HOSP OKLAHOMA CITY OK	73104	2	7	9
	• NETWORK TOTALS •		28	36	64

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
11	450015 DALLAS COUNTY HOSPITAL DISTRICT DALLAS TX	75235	25	49	74
11	450018 UNIVERSITY OF TEXAS-MEDICAL BRANCH GALVESTON TX	77550	7	57	64
11	450051 METHODIST HOSP OF DALLAS DALLAS TX	75208	5	3	8
11	450068 HERMANN HOSP HOUSTON TX	77030	27	46	73
11	450124 BRACKENRIDGE HOSP AUSTIN TX	78701	5	12	17
11	450213 BEXAR COUNTY HOSPITAL DISTRICT SAN ANTONIO TX	78284	12	20	32
11	450358 THE METHODIST HOSPITAL HOUSTON TX	77030	5	23	28
11	450686 LUBBOCK GENERAL HOSPITAL LUBBOCK, TEXAS	79409	0	0	0
	* NETWORK TOTALS *		86	210	296

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
12	190005 NEW ORLEANS CHARITY HOSPITAL NEW ORLEANS LA	70140	0	0	0
12	190035 HOTEL DIEU HOSP NEW ORLEANS LA	70116	3	7	10
12	190098 LOUISIANA STATE UNIV HOSP. SHREVEPORT LA	71103	5	26	31
12	190135 SOUTHERN BAPTIST HOSP NEW ORLEANS LA	70115	2	5	7
12	190176 TULANE MEDICAL CENTER HOSP NEW ORLEANS LA	70112	12	20	32
	* NETWORK TOTALS *		22	58	80

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
13	520098 UNIVERSITY HOSP MADISON WI	53706	45	65	110
13	520174 MILWAUKEE CO GEN HOSP UNIT 1 MILWAUKEE WI 53226		16	44	60
	• NETWORK TOTALS •		61	109	170

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
14	230039 MT CARMEL MERCY HOSP DETROIT MI	48235	6	59	65
14	230046 UNIVERSITY HOSP ANN ARBOR MI	48109	18	17	35
14	230053 HENRY FORD HOSP DETROIT MI	48202	12	31	43
14	230059 ST MARY:S HOSPITAL-ESRD UNIT GRAND RAPIDS MI	49502	15	14	29
14	230076 HUTZEL HOSP DETROIT MI	48201	7	20	27
14	230117 BORGESS HOSP KALAMAZOO MI	49001	5	5	10
14	230130 WM BEAUMONT HOSP ROYAL OAK MI	48072	8	27	35
14	230132 HURLEY HOSP FLINT MI	48502	5	9	14
14	230230 E W SPARROW HOSP LANSING MI	48912	0	0	0
14	230240 CHILDRENS HOSPITAL DETROIT MI	48201	1	9	10
	• NETWORK TOTALS •		77	191	268

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
15	140088 UNIVERSITY OF CHICAGO HOSP + CLINICS CHICAGO IL	60637	14	45	59
15	140119 RUSH-PRESBYTERIAN-ST LUKE :S MED CTR CHICAGO IL	60612	10	8	18
15	140148 MEMORIAL HOSP SPRINGFIELD IL	62701	6	7	13
15	140150 UNIVERSITY OF ILLINOIS HOSP CHICAGO IL	60612	11	35	46
15	140276 LOYOLA UNIV MEDICAL CENTER MAYWOOD IL	60153	6	11	17
15	140281 NORTHWESTERN MEM HOSP CHICAGO IL	60611	10	11	21
15	140283 CHILDRENS MEMORIAL HOSPITAL CHICAGO IL	60614	5	7	12
	• NETWORK TOTALS •		62	124	186

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
16	150003F VA HOSP INDIANAPOLIS IN	46202	2	3	5
16	150032 INDIANA UNIVERSITY HOSPITALS INDIANAPOLIS IN	46202	24	22	46
16	150056 METHODIST HOSP OF INDIANA INDIANAPOLIS IN	46202	4	17	21
	* NETWORK TOTALS *		30	42	72

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRO NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
17	180040 JEWISH HOSP LOUISVILLE KY	40202	5	18	23
17	180067 UNIVERSITY OF KENTUCKY MEDICAL CENTER LEXINGTON KY	40536	10	25	35
17	360003 CINCINNATI GEN HOSP CINCINNATI OH	45267	10	25	35
17	360051 MIAMI VALLEY HOSP DAYTON OH	45409	0	13	13
17	360163 CHRIST HOSP CINCINNATI OH	45219	5	13	18
17	360226 CHILDREN:S HOSPITAL MED CTR CINCINNATI OH	45229	1	10	11
	• NETWORK TOTALS •		31	104	135

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
18	010033 UNIVERSITY OF ALABAMA HOSPS + CLINICS BIRMINGHAMM AL	35294	51	71	122
18	250001 UNIVERSITY MEDICAL DIALYSIS UNIT JACKSON MS	39216	2	25	27
18	440039 VANDERBILT UNIVERSITY HOSP NASHVILLE TN	37232	35	57	92
18	440166 UNIVERSITY OF TENNESSEE HOSPITAL MEMPHIS TN	38103	12	25	37
	• NETWORK TOTALS •		100	178	278

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
19	100007 FLORIDA HOSP ORLANDO FL	32803	8	16	24
19	100022 JACKSON MEMORIAL HOSPITAL MIAMI FLORIDA	33136	19	9	28
19	100113 SHANDS TEACHING HOSP + CLINICS GAINESVILLE FL	32610	31	36	67
19	100128 TAMPA GEN HOSP TAMPA FL	33606	6	40	46
	• NETWORK TOTALS •		64	101	165

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
20	110010 EMORY UNIVERSITY HOSP ATLANTA GA	30322	12	22	34
20	110034 EUGENE TALMADGE MEM HOSP AUGUSTA GA	30912	9	3	12
20	110079 ATLANTA REGIONAL NEPHROLOGY CTR ATLANTA GA	30303	2	0	2
20	110196 H EGLESTON HOSP FOR CHILDREN-ESRD ATLANTA GA	30322	3	3	6
20	420004 SO CAROLINA DIALYSIS + TRANSPLANT CTR CHARLESTON SC	29403	5	24	29
	* NETWORK TOTALS *		31	52	83

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
21	340030 DUKE UNIVERSITY MEDICAL CENTER DURHAM NC	27710	6	27	33
21	340040 PITT CO MEM HOSP GREENVILLE NC	27834	2	3	5
21	340047 NORTH CAROLINA BAPTIST HOSP WINSTON SALEM NC	27103	4	20	24
21	340061 NORTH CAROLINA MEM HOSP CHAPEL HILL NC	27514	3	19	22
21	340113 CHARLOTTE MEM HOSP + MED CTR CHARLOTTE NC	28232	8	15	23
	• NETWORK TOTALS •		23	84	107

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
22	360015 AKRON CITY HOSP AKRON OH	44309	3	17	20
22	360048 MEDICAL COLLEGE OF OHIO AT TOLEDO TOLEDO OH	43614	1	29	30
22	360085 UNIVERSITY HOSP COLUMBUS OH	43210	20	40	60
22	360137 UNIVERSITY HOSP CLEVELAND OH	44106	5	23	28
22	360180 CLEVELAND CLINIC HOSP CLEVELAND OH	44106	19	51	70
22	390164 PRESBYTERIAN-UNIVERSITY HOSP PITTSBURGH PA	15213	3	101	104
	* NETWORK TOTALS *		51	261	312

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
23	090001 GEORGE WASHINGTON HOSP WASHINGTON DC	20037	1	21	22
23	090003 HOWARD UNIVERSITY HOSP WASHINGTON DC	20060	1	14	15
23	090004 GEORGETOWN HOSP WASHINGTON DC	20007	12	27	39
23	090011 WASHINGTON HOSP CENTER WASHINGTON DC	20010	5	15	20
23	090014 CHILDRENS HOSP NATIONAL MEDICAL CENTER WASHINGTON DC	20010	2	5	7
	• NETWORK TOTALS •		21	82	103

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
24	390006 GEISINGER MEDICAL CENTER DANVILLE PA	17822	2	9	11
24	390051 HAHNEMANN MEDICAL COLLEGE + HOSP PHILADELPHIA PA	19102	7	25	32
24	390111 UNIVERSITY OF PENNSYLVANIA HOSP PHILADELPHIA PA	19104	43	44	87
24	390142 ALBERT EINSTEIN MEDICAL CENTER PHILADELPHIA PA	19141	7	14	21
24	390174 THOMAS JEFFERSON UNIVERSITY HOSP PHILADELPHIA PA	19107	4	16	20
24	390256 PENNSYLVANIA STATE UNIVERSITY HERSHEY PA	17033	0	0	0
24	390259 ST CHRISTOPHERS HOSP FOR CHILDREN PHILADELPHIA PA	19133	2	9	11
	• NETWORK TOTALS •		65	117	182

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
25	330012 PRESBYTERIAN HOSP NEW YORK NY	10032	8	25	33
25	330024 MT SINAI HOSP NEW YORK NY	10029	4	15	19
25	330059 MONTEFIORE HOSP BRONX NY	10467	2	55	57
25	330101 NEW YORK HOSP NEW YORK NY	10021	16	44	60
25	330120 ST LUKES HOSP CENTER NEW YORK NY	10025	2	15	17
25	330350 DOWNSTATE MEDICAL CENTER BROOKLYN NY	11203	26	77	103
	• NETWORK TOTALS •		58	231	289

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
26	330005 BUFFALO GEN HOSP BUFFALO NY	14203	7	31	38
26	330013 ALBANY MEDICAL CENTER HOSP ALBANY NY	12208	6	39	45
26	330219 ERIE COUNTY MEDICAL CENTER BUFFALO NY	14215	1	9	10
26	330241 STATE UNIV HOSP-UPSTATE MEDICAL CENTER SYRACUSE NY	13210	13	15	28
26	330285 STRONG MEM HOSPITAL ROCHESTER NY	14642	10	13	23
26	330377 CHILDRENS HOSP OF BUFFALO BUFFALO NY	14222	0	1	1
	• NETWORK TOTALS •		37	108	145

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
27	070022 YALE-NEW HAVEN HOSP NEW HAVEN CT	06504	8	10	18
27	070025 HARTFORD HOSP HARTFORD CT	06115	14	15	29
	• NETWORK TOTALS •		22	25	47

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
28	200009 MAINE MEDICAL CENTER PORTLAND ME	04101	5	14	19
28	220031 UNIVERSITY HOSP BOSTON MA	02118	3	7	10
28	220071 MASSACHUSETTS GEN HOSP BOSTON MA	02114	17	30	47
28	220086 BETH ISRAEL HOSP BOSTON MA	02215	3	8	11
28	220110 BRIGHAM + WOMEN:S HOSP BOSTON MA	02115	14	24	38
28	220116 NEW ENGLAND MEDICAL CENTER HOSP BOSTON MA	02111	2	16	18
28	220118 NEW ENGLAND DEACONESS HOSP BOSTON MA	02215	18	26	44
28	220122 CHILORENS HOSP MEDICAL CENTER BOSTON MA	02115	4	6	10
28	470003 VERMONT MEDICAL CENTER HOSP BURLINGTON VT	05401	6	13	19
	• NETWORK TOTALS •		72	144	216

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE		ZIP	LIVING	CADAVERIC	TOTAL
29	40003F VA HOSP RIO PIEDRAS	PR	00936	15	1	16
	* NETWORK TOTALS *			15	1	16

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
30	490007 MEDICAL CENTER HOSPS-NORFOLK GEN DIV NORFOLK VA	23507	0	38	38
30	490009 UNIVERSITY OF VIRGINIA HOSP CHARLOTTESVILLE VA	22903	1	12	13
30	490032 VIRGINIA HOSP MEDICAL COLLEGE RICHMOND VA	23298	2	23	25
30	49010F VA HOSP RICHMOND VA	23249	0	10	10
	• NETWORK TOTALS •		3	83	86

1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRD NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
31	210002 UNIVERSITY HOSP BALTIMORE MD	21201	7	12	19
31	210009 JOHNS HOPKINS HOSP BALTIMORE MD	21205	4	38	42
31	210029 BALTIMORE CITY HOSP BALTIMORE MD	21224	5	21	26
	• NETWORK TOTALS •		16	71	87

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1981 TRANSPLANTS BY TRANSPLANT CENTER WITHIN ESRO NETWORK

NETWORK	PROVIDER IDENTIFICATION NUMBER PROVIDER NAME CITY, STATE	ZIP	LIVING	CADAVERIC	TOTAL
32	310002 NEWARK BETH ISRAEL HOSP NEWARK NJ	07112	4	40	44
32	310029 OUR LADY OF LOURDES HOSP CAMDEN NJ	08103	3	7	10
32	310078 ST BARNABAS MEDICAL CENTER LIVINGSTON NJ	07039	4	31	35
	• NETWORK TOTALS •		11	78	89
	. . . . N A T I O N A L T O T A L S		1,458	3,427	4,885

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